

**MEMORANDUM**

EPA Region 4 Superfund Division  
Rockwell International Site

BVSPC Project No. 049093  
28 June 2019

To: Shelby Johnston, EPA Task Order COR  
  
From: Tom Moyer, Black & Veatch Task Order Manager  
  
Reference: EPA Contract EP-S4-09-02, Task Order No. 0093  
49093-0105-07-K-01736R0  
  
Subject: Data Validation Report for Sampling Event Beginning 26 March 2019.  
Laboratory Project Numbers: EPA/CLP 19-0113 and 19-0117

**1.0 Overview**

Black & Veatch Special Projects Corp. (Black & Veatch) has reviewed the data for the samples and analyses listed below. The EPA National Functional Guidelines (EPA, 2017a and EPA, 2017b) or method specific QC data were used to evaluate the implementation of field and laboratory QC to ensure acceptable results with a Stage 4 Data Validation (EPA, 2009) with an EPA validation of EPA/CLP laboratory data or a Stage 2B Data Validation (EPA, 2009) with Black & Veatch validation of subcontracted laboratory data. In addition to the National Functional Guidelines, Black & Veatch may utilize laboratory performance criteria, method specific guidance, field documentation, QC data, and professional judgement to meet the intent of the applicable Data Validation Stage. Where performance criteria are not met, the data is qualified to indicate the degree of confidence in the final result according to data quality indicators of precision, accuracy (bias), representativeness, completeness, comparability, and sensitivity.

The analytical data included for this project number are of sufficient quality and are deemed acceptable for their intended use except where noted below. Commonly used acronyms and abbreviations used during data validation are presented in Attachment 1.

**2.0 Verification**

The samples reported were collected in accordance with the Black & Veatch Rockwell International Site Sampling and Analysis Plan Volume 1 Quality Assurance Project Plan Revision 1 (Black & Veatch 2018a) and Volume 2 Field Sampling Plan, Revision 1 (Black & Veatch 2018b), Field Sampling Plan, Addendum 2 (Black & Veatch 2018c). Black & Veatch submitted: 29 groundwater, 22 subsurface soil, and 14 field QC samples (Table 2-1) to the EPA/CLP laboratory as indicated in the Chain of Custody (Attachment 2). The 14 QC samples were comprised of two field duplicate pairs, one equipment blank, and 11 trip blanks.

A total of 285 samples were analyzed utilizing 15 analytical methods (Table 2-2). Target analyte(s) and/or method(s) include: TOC, Sulfate, Nitrate/Nitrite, Alkalinity, Metals (Total and Dissolved), Hexavalent Chromium (Total and Dissolved), SVOCs, VOCs, and % Moisture (Table 2-3).

**3.0 Validation**

### 3.1 Field QC

#### Sample Collection

No issues were noted for general sampling protocols which may affect data quality or integrity including: sampling methods, preservation, handling, hold time, etc.

#### Field Duplicate

The current National Functional Guidelines do not have standard acceptance criteria for the evaluation of field duplicates. Unless planning documents dictate otherwise, the evaluation of field duplicates is based on the *Region I, EPA-New England Data Validation Functional Guidelines for Evaluating Environmental Analyses, December 1996*. When applicable the RPDs for aqueous samples must be less than or equal to 30%, solid samples must be less than or equal to 50%, and (based on professional judgement) air samples must be less than or equal to 30%. Analytes exceeding the performance criteria are J qualified in the primary and secondary samples of duplicate pairs. RPDs were calculated for all analytes with concentrations greater than the MRL in at least one sample. The MRL is used for calculation of the RPD of non-detections if the duplicate sample (primary or secondary) had a detection.

Two field duplicate sets (Set 1 MIHPT45GW\_46, MIHPT945GW\_46; and Set 2 MIHPT48GW\_24, MIHPT948GW\_24) were submitted for this sampling event. Only analytes of duplicate sets which appear to have an RPD issue are summarized below.

#### Set 1 MIHPT45GW\_46, MIHPT945GW\_46

Total Organic Carbon	
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#### Field Blanks

Field blanks and their associated samples are summarized on Table 3-2a. Blank detections, results, and any associated sample detections are summarized on Table 3-2b when necessary. Related sample analyte detections below the adjusted MRL received an additional final interpreted qualifier of U. Only blank detections and subsequent sample qualifications are summarized below.

#### Field Reagent Blanks

Field blanks were not submitted for this sampling event.

#### Trip Blank

Five soil trip blanks (TB01SB032619, TB02SB032819, TB03SB032919, TB04SB040119, TB05SB040319) and six aqueous trip blanks (TB01GW032619, TB02GW032719, TB03GW032919, TB04GW040119, TB05GW040319, TB06GW040419) were submitted for this sampling event. None of the samples exhibited any detections.

#### Equipment Blank

Equipment blanks were not submitted for this sampling event.

#### Preservative Blank

Preservative blanks were not submitted for this sampling event.

### 3.2 Laboratory QC

Analytical data from a CLP or EPA regional laboratory has received a Stage 4 data validation summarized below and amended with further validation criteria as noted. If applicable, the validation report will

include Table 3-3a which summarizes validation qualifiers applied during EPA validation and presented in the data reports. Final interpreted qualifiers, results with detections but no qualifiers, and non-detections, and estimated results below the reporting limit are not included in the table summary.

Laboratory QC data submitted from subcontracted laboratory will receive a Stage 2B data validation. During the Stage 2B validation the data has been compared to expected QC checks for the specified level of data validation in Section 1.0. If applicable, the Stage 2B validation will include Table 3-3b in which the sample analysis is cross-checked against the necessary validation criteria to identify where no QC check was expected (NA), a QC check is typically expected but there is no data to associate with the samples submitted (ND), QC data is available and does not exhibit any exceptions to acceptance criteria (OK), or QC data that has been submitted for an expected QC check point exhibits a potential conflict with either laboratory internal acceptance criteria, EPA guidelines, or professional judgement for data validation (QC).

QC issues are organized alphabetically by the analytical method reported and only areas where a potential conflict may exist are addressed.

### **3.2.1 CNA:ASB 107C, (TOC; Soil)**

No QC issues noted with this analysis method.

### **3.2.2 CNA:EPA 300.0 (Sulfate as SO<sub>4</sub>; Water)**

No QC issues noted with this analysis method.

### **3.2.3 CNA:EPA 353.2 (Nitrate/Nitrite as N; Water)**

No QC issues noted with this analysis method.

### **3.2.4 CNA:SM 2320B (Alkalinity, Total (as CaCO<sub>3</sub>); Water)**

No QC issues noted with this analysis method.

### **3.2.5 CNA:SM 5310B (Total Organic Carbon, Water)**

QM-1 - Matrix spike recovery less than method control limits. An additional final interpreted qualifier of J,O was added to detections.

### **3.2.6 DMTL:EPA 200.8 (Dissolved Metals; Water)**

No QC issues noted with this analysis method.

### **3.2.7 DMTL:EPA 218.6 (Dissolved Chromium, Hexavalent; Water)**

No QC issues noted with this analysis method.

### **3.2.8 DMTL:EPA 6010 (Dissolved Metals; Water)**

B-2 - Reporting level elevated due to trace amounts of analyte present in the method blank. A final interpreted qualifier of U,O was added to non-detections.

### **3.2.9 PHYSP:EPA 200.2 (% Solids; Soil)**

No QC issues noted with this analysis method.

**3.2.10 SVOA:CLP SOM02.4 B (SVOCs; Water)**

CLP15 - TIC results reported as identified by lab. IDs not verified. A final interpreted qualifier of J,O was added to unidentified detections and NJ,O to detections of tentatively identified compounds.

CLP16 - Initial calibration response erratic. A final interpreted qualifier of U,J,O was added to non-detections.

CLP25 - PE sample recovery scored as warning-low. A final interpreted qualifier of U,J,O was added to non-detections.

J The identification of the analyte is acceptable; the reported value is an estimate.

NJ - Presumptive evidence that analyte is present; reported as a tentative identification with an estimated value. A final interpreted qualifier of NJ,O to detections of tentatively identified compounds.

QC-1 - Analyte concentration low in continuing calibration verification standard. A final interpreted qualifier of U,J,O was added to non-detections.

QC-3 - Analyte calibration criteria not met. A final interpreted qualifier of U,J,O was added to non-detections.

QM-1 - Matrix spike recovery less than method control limits. A final interpreted qualifier of U,J,O was added to non-detections.

QS-3 - Surrogate recovery is lower than established control limits. A final interpreted qualifier of U,J,O was added to non-detections.

QS-4 - Surrogate recovery less than 10%. A final interpreted qualifier of U,J,O was added to non-detections and U,R,O for non-detections.

R - The presence or absence of the analyte can not be determined from the data due to severe quality control problems (QS-4). The data are rejected and considered unusable. A final interpreted qualifier of U,R,O was added to non-detections.

**3.2.11 TMTL:EPA 200.8 (Metals; Soil and Water)**

QR-2 - MRL verification recovery greater than upper control limits. A final interpreted qualifier of J,O was added to detections

**3.2.12 TMTL:EPA 218.6 (Metals; Soil and Water)**

B-2 - Reporting level elevated due to trace amounts of analyte present in the method blank. A final interpreted qualifier of U,O was added to non-detections.

QM-1 - Matrix spike recovery less than method control limits. A final interpreted qualifier of U,J,O was added to non-detections.

QR-2 - MRL verification recovery greater than upper control limits. A final interpreted qualifier of J,O was added to detections

### **3.2.1 TMTL:EPA 6010 (Metals; Soil and Water)**

B-2 - Reporting level elevated due to trace amounts of analyte present in the method blank. A final interpreted qualifier of U,O was added to non-detections.

QM-1 - Matrix spike recovery less than method control limits. A final interpreted qualifier of U,J,O was added to non-detections.

QR-2 - MRL verification recovery greater than upper control limits. A final interpreted qualifier of J,O was added to detections

### **3.2.1 VOA:CLP SOM02.4 V (VOCs; Soil and Water)**

CLP01 - Concentration reported is less than the lowest standard on calibration curve. A final interpreted qualifier of J,O was added to detections

CLP15 - TIC results reported as identified by lab. IDs not verified. A final interpreted qualifier of J,O was added to unidentified detections and NJ,O to detections of tentatively identified compounds.

CLP16 - Initial calibration response erratic. A final interpreted qualifier of U,J,O was added to non-detections.

CLP25 - PE sample recovery scored as warning-low. A final interpreted qualifier of U,J,O was added to non-detections.

J The identification of the analyte is acceptable; the reported value is an estimate.

NJ - Presumptive evidence that analyte is present; reported as a tentative identification with an estimated value. A final interpreted qualifier of NJ,O to detections of tentatively identified compounds.

QC-1 - Analyte concentration low in continuing calibration verification standard. A final interpreted qualifier of U,J,O was added to non-detections.

QM-1 - Matrix spike recovery less than method control limits. A final interpreted qualifier of U,J,O was added to non-detections.

QM-1 - Matrix spike recovery less than method control limits. A final interpreted qualifier of U,J,O was added to non-detections.

QS-3 - Surrogate recovery is lower than established control limits. A final interpreted qualifier of U,J,O was added to non-detections.

QS-4 - Surrogate recovery less than 10%. A final interpreted qualifier of U,J,O was added to non-detections and U,R,O for non-detections.

The data are rejected and considered unusable.

**3.2.1 VOA:CLP VOA (% Moisture; Soil)**

No QC issues noted with this analysis method

**Tables**

- 2-1 Sample Summary
- 2-2 Analysis Methods
- 2-3 Analysis Types
- 2-4 Analysis Batches
- 3-1 Field Duplicate Detections
- 3-2a Field Blank Associations
- 3-2b Field Blank Detection Comparison (Not Necessary for this Sampling Event)
- 3-3a Data Validation Summary for EPA/CLP
- 3-3b Data Validation Check Sheet for Non-EPA/CLP (Not Necessary for this Sampling Event)

**Attachments**

- 1. Acronyms and Abbreviations
- 2. Chain of Custody
- 3. Sample Data Sheets with Additional Interpreted Qualifiers
- 4. Support Documentation (Not Necessary for this Sampling Event)

**References**

Black & Veatch, 2018a. Black & Veatch Sampling and Analysis Plan Rockwell International Wheel and Trim Eastern Heights, Operable Unit 1, Quality Assurance Project Plan Volume 1, June 2018.

Black & Veatch, 2018b. Black & Veatch Sampling and Analysis Plan Rockwell International Site, Volume 2 Field Sampling Plan, Revision 1. June 2018.

Black & Veatch, 2018c. Black & Veatch Sampling and Analysis Plan Rockwell International Wheel and Trim Eastern Heights, Operable Unit 1, Field Sampling Plan Addendum #2, September 2018.

EPA, 2009. EPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, OSWER No. 9200.1-85, EPA 540-R-08-005. January 13, 2009.

EPA, 2017a. EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, OLEM 9355.0-136, EPA-540-R-2017-002. January 2017.

EPA, 2017b. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, OLEM 9355.0-135, EPA-540-R-2017-001. January 2017.

## Tables

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**TABLE 2-1 SAMPLE SUMMARY**

SAMPLE ID <sup>1</sup>	SAMPLE DATE	SAMPLE TIME	MATRIX	FIELD/QC
TB01GW032619	26-Mar-19	8:15	TW	TB
TB01SB032619	26-Mar-19	8:15	TS	TB
MiHPT31GW25	26-Mar-19	17:55	GW	Field
MiHPT31GW29	26-Mar-19	18:20	GW	Field
MiHPT29SB20	27-Mar-19	11:25	SB	Field
MiHPT29SB29	27-Mar-19	11:35	SB	Field
MiHPT29SB52	27-Mar-19	13:00	SB	Field
MiHPT31SB05	27-Mar-19	16:30	SB	Field
TB02GW032719	27-Mar-19	17:00	TW	TB
MiHPT29GW44	27-Mar-19	19:15	GW	Field
TB02SB032819	28-Mar-19	8:15	TS	TB
MiHPT35SB23	28-Mar-19	10:45	SB	Field
MiHPT35SB29.5	28-Mar-19	11:00	SB	Field
MiHPT35SB53	28-Mar-19	12:25	SB	Field
TB03GW032919	29-Mar-19	8:00	TW	TB
MIHPT35GW_27	29-Mar-19	9:25	GW	Field
MIHPT35GW_37	29-Mar-19	9:45	GW	Field
TB03SB032919	29-Mar-19	12:30	TS	TB
MIHPT33SB_05	29-Mar-19	13:00	SB	Field
MIHPT29GW_24	29-Mar-19	13:30	GW	Field
MIHPT33SB_27	29-Mar-19	14:15	SB	Field
MIHPT50SB_2.5	29-Mar-19	15:30	SB	Field
MIHPT50SB_4	29-Mar-19	15:40	SB	Field
MIHPT50SB_5.2	29-Mar-19	15:55	SB	Field
MIHPT33GW_29	30-Mar-19	9:35	GW	Field
MIHPT33GW_50	30-Mar-19	13:10	GW	Field
MIHPT33GW_21	30-Mar-19	13:25	GW	Field
MIHPT45GW_46	31-Mar-19	11:15	GW	SET1FD1
MIHPT945GW_46	31-Mar-19	11:15	GW	SET1FD2
MIHPT45GW_24	31-Mar-19	13:10	GW	Field
MIHPT41GW_24	31-Mar-19	13:25	GW	Field
MIHPT45GW_38	31-Mar-19	14:15	GW	Field
MIHPT41GW_36	31-Mar-19	14:15	GW	Field
TB04SB040119	1-Apr-19	7:30	TS	TB
MIHPT41SB_05	1-Apr-19	7:55	SB	Field
MIHPT45SB_04	1-Apr-19	8:25	SB	Field
MIHPT45SB_05	1-Apr-19	8:35	SB	Field
MIHPT41SB_24	1-Apr-19	9:45	SB	Field
TB04GW040119	1-Apr-19	13:00	TW	TB
MIHPT34GW_22	1-Apr-19	15:17	GW	Field
MIHPT49SB_14	1-Apr-19	15:50	SB	Field
MIHPT34GW_26	1-Apr-19	18:00	GW	Field
MIHPT49GW_41	2-Apr-19	9:00	GW	Field
MIHPT49GW_21	2-Apr-19	10:10	GW	Field
TB05GW040319	3-Apr-19	7:00	TW	TB

**TABLE 2-1 SAMPLE SUMMARY**

TB05SB040319	3-Apr-19	7:00	TS	TB
MIHPT55SB_5	3-Apr-19	7:25	SB	Field
MIHPT28SB_5	3-Apr-19	7:45	SB	Field
MIHPT28SB_7	3-Apr-19	8:00	SB	Field
RB01MIHPT28	3-Apr-19	9:30	RW	EB
MIHPT39GW_30	3-Apr-19	13:20	GW	Field
MIHPT53SB_24	3-Apr-19	14:00	SB	Field
MIHPT39GW_40	3-Apr-19	14:45	GW	Field
MIHPT39GW_23	3-Apr-19	15:40	GW	Field
MIHPT56SB_6	3-Apr-19	16:45	SB	Field
TB06GW040419	4-Apr-19	7:00	TW	TB
MIHPT48GW_45	4-Apr-19	10:10	GW	Field
MIHPT48GW_24	4-Apr-19	10:40	GW	SET2FD1
MIHPT948GW_24	4-Apr-19	10:40	GW	SET2FD2
MIHPT53GW_24	4-Apr-19	12:40	GW	Field
MIHPT53GW_35	4-Apr-19	14:55	GW	Field
MIHPT36GW_24	5-Apr-19	9:05	GW	Field
MIHPT36GW_44	5-Apr-19	9:20	GW	Field
QC Samples	14			
Sample Locations	49			
<b>Grand Total</b>	<b>63</b>			

Notes:

- Field QC Samples  
1 - Samples ordered by date and time the sample was acquired

**TABLE 2-2 ANALYSIS METHODS**

SAMPLE ID <sup>1</sup>	CNA:ASB 107C	CNA:EPA 300.0	CNA:EPA 353.2	CNA:SM 2320B	CNA:SM 5310B	DMTL:EPA 200.8	DMTL:EPA 218.6
MIHPT28SB_5	1						
MIHPT28SB_7	1						
MIHPT29GW_24		1	1	1	1		1
MiHPT29GW44							
MiHPT29SB20	1						
MiHPT29SB29							
MiHPT29SB52							
MiHPT31GW25							
MiHPT31GW29		1	1	1	1		1
MiHPT31SB05							
MIHPT33GW_21							
MIHPT33GW_29		1	1	1	1		1
MIHPT33GW_50							1
MIHPT33SB_05							
MIHPT33SB_27							
MIHPT34GW_22		1	1	1	1	1	1
MIHPT34GW_26		1	1	1	1		1
MIHPT35GW_27		1	1	1	1		1
MIHPT35GW_37							
MiHPT35SB23							
MiHPT35SB29.5							
MiHPT35SB53							
MIHPT36GW_24							1
MIHPT36GW_44							1
MIHPT39GW_23						1	1
MIHPT39GW_30		1	1	1	1	1	1
MIHPT39GW_40						1	1
MIHPT41GW_24		1	1	1	1		1
MIHPT41GW_36							
MIHPT41SB_05							
MIHPT41SB_24	1						
MIHPT45GW_24		1	1	1	1		1
MIHPT45GW_38		1	1	1	1		1
MIHPT45GW_46		1	1	1	1		1
MIHPT45SB_04							
MIHPT45SB_05							
MIHPT48GW_24						1	1
MIHPT48GW_45							1
MIHPT49GW_21		1	1	1	1		1
MIHPT49GW_41		1	1	1	1		1
MIHPT49SB_14	1						
MIHPT50SB_2.5							
MIHPT50SB_4							
MIHPT50SB_5.2							

**TABLE 2-2 ANALYSIS METHODS**

SAMPLE ID <sup>1</sup>	CNA:ASB 107C	CNA:EPA 300.0	CNA:EPA 353.2	CNA:SM 2320B	CNA:SM 5310B	DMTL:EPA 200.8	DMTL:EPA 218.6
MIHPT53GW_24		1	1	1	1		1
MIHPT53GW_35						1	1
MIHPT53SB_24	1						
MIHPT55SB_5	1						
MIHPT56SB_6	1						
MIHPT945GW_46		1	1	1	1		1
MIHPT948GW_24						1	1
RB01MIHPT28							
TB01GW032619							
TB01SB032619							
TB02GW032719							
TB02SB032819							
TB03GW032919							
TB03SB032919							
TB04GW040119							
TB04SB040119							
TB05GW040319							
TB05SB040319							
TB06GW040419							
<b>GRAND TOTAL</b>	<b>8</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>7</b>	<b>24</b>

Notes:

- Field QC Samples
- 1 - Samples ordered by the Sample ID

**TABLE 2-2 ANALYSIS METHODS**

SAMPLE ID <sup>1</sup>	DMTL:EPA 6010	PHYSP:EPA 200.2	SVOA:CLP SOM02.4 B	TMTL:EPA 200.8	TMTL:EPA 218.6	TMTL:EPA 6010	VOA:CLP SOM02.4 V
MIHPT28SB_5			1		1	1	1
MIHPT28SB_7			1		1	1	1
MIHPT29GW_24				1	1		1
MiHPT29GW44							1
MiHPT29SB20			1		1		1
MiHPT29SB29							1
MiHPT29SB52							1
MiHPT31GW25							1
MiHPT31GW29				1	1		1
MiHPT31SB05							1
MIHPT33GW_21							1
MIHPT33GW_29				1	1		1
MIHPT33GW_50					1		1
MIHPT33SB_05							1
MIHPT33SB_27							1
MIHPT34GW_22	1			1			1
MIHPT34GW_26					1		1
MIHPT35GW_27				1	1		1
MIHPT35GW_37							1
MiHPT35SB23							1
MiHPT35SB29.5			1		1	1	1
MiHPT35SB53							1
MIHPT36GW_24					1		1
MIHPT36GW_44					1		1
MIHPT39GW_23	1						1
MIHPT39GW_30	1			1			1
MIHPT39GW_40	1						1
MIHPT41GW_24				1	1		1
MIHPT41GW_36							1
MIHPT41SB_05							1
MIHPT41SB_24		1			1	1	1
MIHPT45GW_24				1	1		1
MIHPT45GW_38				1	1		1
MIHPT45GW_46				1	1		1
MIHPT45SB_04			1		1	1	1
MIHPT45SB_05							1
MIHPT48GW_24	1						1
MIHPT48GW_45					1		1
MIHPT49GW_21				1	1		1
MIHPT49GW_41				1	1		1
MIHPT49SB_14			1		1	1	1
MIHPT50SB_2.5							1
MIHPT50SB_4							1
MIHPT50SB_5.2							1

**TABLE 2-2 ANALYSIS METHODS**

SAMPLE ID <sup>1</sup>	DMTL:EPA 6010	PHYSP:EPA 200.2	SVOA:CLP SOM02.4 B	TMTL:EPA 200.8	TMTL:EPA 218.6	TMTL:EPA 6010	VOA:CLP SOM02.4 V
MIHPT53GW_24			1	1		1	1
MIHPT53GW_35	1						1
MIHPT53SB_24		1		1	1	1	1
MIHPT55SB_5		1		1	1	1	1
MIHPT56SB_6		1		1	1	1	1
MIHPT945GW_46			1	1		1	1
MIHPT948GW_24	1						1
RB01MIHPT28				1		1	1
TB01GW032619							1
TB01SB032619							1
TB02GW032719							1
TB02SB032819							1
TB03GW032919							1
TB03SB032919							1
TB04GW040119							1
TB04SB040119							1
TB05GW040319							1
TB05SB040319							1
TB06GW040419							1
GRAND TOTAL	7	10	14	28	9	28	63

Notes:

- Field QC Samples
- 1 - Samples ordered by the Sample ID

TABLE 2-2 ANALYSIS METHODS

SAMPLE ID <sup>1</sup>	VOA:CLP VOA	TOTAL	MATRIX	FIELD/QC
MIHPT28SB_5	1	7	SB	Field
MIHPT28SB_7	1	7	SB	Field
MIHPT29GW_24		9	GW	Field
MiHPT29GW44		1	GW	Field
MiHPT29SB20	1	6	SB	Field
MiHPT29SB29	1	2	SB	Field
MiHPT29SB52	1	2	SB	Field
MiHPT31GW25		1	GW	Field
MiHPT31GW29		9	GW	Field
MiHPT31SB05	1	2	SB	Field
MIHPT33GW_21		1	GW	Field
MIHPT33GW_29		9	GW	Field
MIHPT33GW_50		4	GW	Field
MIHPT33SB_05	1	2	SB	Field
MIHPT33SB_27	1	2	SB	Field
MIHPT34GW_22		9	GW	Field
MIHPT34GW_26		8	GW	Field
MIHPT35GW_27		9	GW	Field
MIHPT35GW_37		1	GW	Field
MiHPT35SB23	1	2	SB	Field
MiHPT35SB29.5	1	6	SB	Field
MiHPT35SB53	1	2	SB	Field
MIHPT36GW_24		4	GW	Field
MIHPT36GW_44		4	GW	Field
MIHPT39GW_23		4	GW	Field
MIHPT39GW_30		9	GW	Field
MIHPT39GW_40		4	GW	Field
MIHPT41GW_24		9	GW	Field
MIHPT41GW_36		1	GW	Field
MIHPT41SB_05	1	2	SB	Field
MIHPT41SB_24	1	7	SB	Field
MIHPT45GW_24		9	GW	Field
MIHPT45GW_38		9	GW	Field
MIHPT45GW_46		9	GW	SET1FD1
MIHPT45SB_04	1	6	SB	Field
MIHPT45SB_05	1	2	SB	Field
MIHPT48GW_24		4	GW	SET2FD1
MIHPT48GW_45		4	GW	Field
MIHPT49GW_21		9	GW	Field
MIHPT49GW_41		9	GW	Field
MIHPT49SB_14	1	7	SB	Field
MIHPT50SB_2.5	1	2	SB	Field
MIHPT50SB_4	1	2	SB	Field
MIHPT50SB_5.2	1	2	SB	Field

**TABLE 2-2 ANALYSIS METHODS**

SAMPLE ID <sup>1</sup>	VOA:CLP VOA	TOTAL	MATRIX	FIELD/QC
MIHPT53GW_24		<b>9</b>	GW	Field
MIHPT53GW_35		<b>4</b>	GW	Field
MIHPT53SB_24	1	<b>7</b>	SB	Field
MIHPT55SB_5	1	<b>7</b>	SB	Field
MIHPT56SB_6	1	<b>7</b>	SB	Field
MIHPT945GW_46		<b>9</b>	GW	SET1FD2
MIHPT948GW_24		<b>4</b>	GW	SET2FD2
RB01MIHPT28		<b>3</b>	RW	EB
TB01GW032619		<b>1</b>	TW	TB
TB01SB032619	1	<b>2</b>	TS	TB
TB02GW032719		<b>1</b>	TW	TB
TB02SB032819	1	<b>2</b>	TS	TB
TB03GW032919		<b>1</b>	TW	TB
TB03SB032919	1	<b>2</b>	TS	TB
TB04GW040119		<b>1</b>	TW	TB
TB04SB040119	1	<b>2</b>	TS	TB
TB05GW040319		<b>1</b>	TW	TB
TB05SB040319	1	<b>2</b>	TS	TB
TB06GW040419		<b>1</b>	TW	TB
<b>GRAND TOTAL</b>	<b>27</b>	<b>285</b>		<b>14</b>

Notes:

- Field QC Samples
- 1 - Samples ordered by the Sample ID

**TABLE 2-3 ANALYSIS TYPES**

<b>ANALYSIS TYPE</b>	<b>ANALYSIS METHOD TARGET ANALYTES</b>
Classical/Nutrient Analysis	<b>CNA:ASB 107C</b> Total Organic Carbon
Classical/Nutrient Analysis	<b>CNA:EPA 300.0</b> Sulfate as SO <sub>4</sub>
Classical/Nutrient Analysis	<b>CNA:EPA 353.2</b> Nitrate/Nitrite as N
Classical/Nutrient Analysis	<b>CNA:SM 2320B</b> Alkalinity, Total (as CaCO <sub>3</sub> )
Classical/Nutrient Analysis	<b>CNA:SM 5310B</b> Total Organic Carbon
Metals	<b>DMTL:EPA 200.8</b> Antimony Arsenic Cadmium Lead Selenium Thallium
Metals	<b>DMTL:EPA 218.6</b> Chromium, Hexavalent
Metals	<b>DMTL:EPA 6010</b> Aluminum Barium Beryllium Calcium Chromium Cobalt Copper Iron Magnesium Manganese Molybdenum Nickel Potassium Silver Sodium Strontium Tin Titanium Vanadium Yttrium Zinc
Physical Properties	<b>PHYSP:EPA 200.2</b> % Solids
SVOCs	<b>SVOA:CLP SOM02.4 B</b> (3-and/or 4-)Methylphenol

**TABLE 2-3 ANALYSIS TYPES**

ANALYSIS TYPE	ANALYSIS METHOD TARGET ANALYTES
	1,1-Biphenyl
	1,2,4,5-Tetrachlorobenzene
	1,4-Dioxane
	2,3,4,6-Tetrachlorophenol
	2,4,5-Trichlorophenol
	2,4,6-Trichlorophenol
	2,4-Dichlorophenol
	2,4-Dimethylphenol
	2,4-Dinitrophenol
	2,4-Dinitrotoluene
	2,6-Dinitrotoluene
	2-Chloronaphthalene
	2-Chlorophenol
	2-Methyl-4,6-dinitrophenol
	2-Methylnaphthalene
	2-Methylphenol
	2-Nitroaniline
	2-Nitrophenol
	3,3'-Dichlorobenzidine
	3-Nitroaniline
	4-Bromophenyl phenyl ether
	4-Chloro-3-methylphenol
	4-Chloroaniline
	4-Chlorophenyl phenyl ether
	4-Nitroaniline
	4-Nitrophenol
	Acenaphthene
	Acenaphthylene
	Acetophenone
	Anthracene
	Atrazine
	Benzaldehyde
	Benzo(a)anthracene
	Benzo(a)pyrene
	Benzo(b)fluoranthene
	Benzo(g,h,i)perylene
	Benzo(k)fluoranthene
	Benzyl butyl phthalate
	Bis(2-chloro-1-methylethyl) ether
	Bis(2-chloroethoxy)methane
	bis(2-Chloroethyl) Ether
	Bis(2-ethylhexyl) phthalate
	Caprolactam
	Carbazole
	Chrysene

**TABLE 2-3 ANALYSIS TYPES**

ANALYSIS TYPE	ANALYSIS METHOD TARGET ANALYTES
	Dibenzo(a,h)anthracene
	Dibenzofuran
	Diethyl phthalate
	Dimethyl phthalate
	Di-n-butylphthalate
	Di-n-octylphthalate
	Fluoranthene
	Fluorene
	Hexachlorobenzene (HCB)
	Hexachlorobutadiene
	Hexachlorocyclopentadiene (HCCP)
	Hexachloroethane
	Indeno (1,2,3-cd) pyrene
	Isophorone
	Naphthalene
	Nitrobenzene
	n-Nitroso di-n-Propylamine
	n-Nitrosodiphenylamine/Diphenylamine
	Pentachlorophenol
	Phenanthrene
	Phenol
	Propylparaben
	Pyrene
	Tentatively Identified Compounds
	Unidentified Compound(s)
Metals	<b>TMTL:EPA 200.8</b>
	Antimony
	Arsenic
	Cadmium
	Lead
	Selenium
	Thallium
Metals	<b>TMTL:EPA 218.6</b>
	Chromium, Hexavalent
Metals	<b>TMTL:EPA 6010</b>
	Aluminum
	Barium
	Beryllium
	Calcium
	Chromium
	Cobalt
	Copper
	Iron
	Magnesium
	Manganese

**TABLE 2-3 ANALYSIS TYPES**

ANALYSIS TYPE	ANALYSIS METHOD TARGET ANALYTES
	Molybdenum
	Nickel
	Potassium
	Silver
	Sodium
	Strontium
	Tin
	Titanium
	Vanadium
	Yttrium
	Zinc
VOCs	<b>VOA:CLP SOM02.4 V</b>
	(m- and/or p-)Xylene
	.alpha.-Pinene
	1,1,1-Trichloroethane
	1,1,2,2-Tetrachloroethane
	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)
	1,1,2-Trichloroethane
	1,1-Dichloroethane
	1,1-Dichloroethene (1,1-Dichloroethylene)
	1,2,3-Trichlorobenzene
	1,2,4-Trichlorobenzene
	1,2-Dibromo-3-Chloropropane (DBCP)
	1,2-Dibromoethane (EDB)
	1,2-Dichlorobenzene
	1,2-Dichloroethane
	1,2-Dichloropropane
	1,3-Dichlorobenzene
	1,4-Dichlorobenzene
	Acetone
	Benzene
	Bromochloromethane
	Bromodichloromethane
	Bromoform
	Bromomethane
	Carbon disulfide
	Carbon Tetrachloride
	Chlorobenzene
	Chloroethane
	Chloroform
	Chloromethane
	cis-1,2-Dichloroethene
	cis-1,3-Dichloropropene
	Cyclohexane
	Cyclotetrasiloxane, octamethyl-

**TABLE 2-3 ANALYSIS TYPES**

<b>ANALYSIS TYPE</b>	<b>ANALYSIS METHOD TARGET ANALYTES</b>
	Dibromochloromethane
	Dichlorodifluoromethane (Freon 12)
	Ethyl Benzene
	Isopropylbenzene
	Methyl Acetate
	Methyl Butyl Ketone
	Methyl Ethyl Ketone
	Methyl Isobutyl Ketone
	Methyl T-Butyl Ether (MTBE)
	Methylcyclohexane
	Methylene Chloride
	o-Xylene
	Styrene
	Tentatively Identified Compounds
	Tetrachloroethene (Tetrachloroethylene)
	Toluene
	trans-1,2-Dichloroethene
	trans-1,3-Dichloropropene
	Trichloroethene (Trichloroethylene)
	Trichlorofluoromethane (Freon 11)
	Unidentified Compound(s)
	Vinyl chloride
Physical Properties	<b>VOA:CLP VOA</b>
	% Moisture

TABLE 2-4 ANALYSIS BATCHES

SDG	SAMPLE ID	METHOD BATCH <sup>1</sup> LAB ID	ANALYSIS DATE	ANALYSIS TIME	RECEIPT DATE	RECEIPT TIME	SAMPLE DATE	SAMPLE TIME	QC
		CNA:ASB 107C	25-Apr-19	12:00					
		(blank)	25-Apr-19	12:00					
19-0113	MiHPT29SB20	R4-E191309-01	25-Apr-19	12:00	29-Mar-19	10:30	27-Mar-19	11:25	
19-0113	MIHPT41SB_24	R4-E191401-06	25-Apr-19	12:00	2-Apr-19	10:20	1-Apr-19	9:45	
19-0113	MIHPT49SB_14	R4-E191401-12	25-Apr-19	12:00	2-Apr-19	10:20	1-Apr-19	15:50	
19-0113	MIHPT28SB_5	R4-E191408-02	25-Apr-19	12:00	5-Apr-19	10:45	3-Apr-19	7:45	
19-0113	MIHPT28SB_7	R4-E191408-03	25-Apr-19	12:00	5-Apr-19	10:45	3-Apr-19	8:00	
19-0113	MIHPT53SB_24	R4-E191408-07	25-Apr-19	12:00	5-Apr-19	10:45	3-Apr-19	14:00	
19-0113	MIHPT55SB_5	R4-E191408-08	25-Apr-19	12:00	5-Apr-19	10:45	3-Apr-19	7:25	
19-0113	MIHPT56SB_6	R4-E191408-09	25-Apr-19	12:00	5-Apr-19	10:45	3-Apr-19	16:45	
		CNA:EPA 300.0	15-Apr-19	0:10					
		(blank)	15-Apr-19	0:10					
19-0113	MiHPT31GW29	R4-E191309-02	15-Apr-19	17:51	29-Mar-19	10:30	26-Mar-19	18:20	
19-0113	MIHPT29GW_24	R4-E191401-01	15-Apr-19	18:54	2-Apr-19	10:20	29-Mar-19	13:30	
19-0113	MIHPT33GW_29	R4-E191401-02	15-Apr-19	19:15	2-Apr-19	10:20	30-Mar-19	9:35	
19-0113	MIHPT35GW_27	R4-E191401-04	15-Apr-19	19:36	2-Apr-19	10:20	29-Mar-19	9:25	
19-0113	MIHPT41GW_24	R4-E191401-05	15-Apr-19	19:57	2-Apr-19	10:20	31-Mar-19	13:25	
19-0113	MIHPT45GW_24	R4-E191401-07	15-Apr-19	20:18	2-Apr-19	10:20	31-Mar-19	13:10	
19-0113	MIHPT45GW_38	R4-E191401-08	15-Apr-19	20:39	2-Apr-19	10:20	31-Mar-19	14:15	
19-0113	MIHPT45GW_46	R4-E191401-09	15-Apr-19	21:00	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT945GW_46	R4-E191401-10	15-Apr-19	21:21	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT34GW_22	R4-E191404-01	15-Apr-19	22:46	3-Apr-19	10:45	1-Apr-19	15:17	
19-0113	MIHPT34GW_26	R4-E191404-02	15-Apr-19	23:28	3-Apr-19	10:45	1-Apr-19	18:00	
19-0113	MIHPT49GW_21	R4-E191404-03	15-Apr-19	23:49	3-Apr-19	10:45	2-Apr-19	10:10	
19-0113	MIHPT49GW_41	R4-E191404-04	16-Apr-19	0:10	3-Apr-19	10:45	2-Apr-19	9:00	
19-0113	MIHPT39GW_30	R4-E191408-05	16-Apr-19	0:52	5-Apr-19	10:45	3-Apr-19	13:20	
19-0113	MIHPT53GW_24	R4-E191502-06	16-Apr-19	1:34	9-Apr-19	10:20	4-Apr-19	12:40	
		CNA:EPA 353.2	17-Apr-19	15:43					
		(blank)	17-Apr-19	15:43					
19-0113	MiHPT31GW29	R4-E191309-02	17-Apr-19	15:43	29-Mar-19	10:30	26-Mar-19	18:20	
19-0113	MIHPT29GW_24	R4-E191401-01	17-Apr-19	15:43	2-Apr-19	10:20	29-Mar-19	13:30	
19-0113	MIHPT33GW_29	R4-E191401-02	17-Apr-19	15:43	2-Apr-19	10:20	30-Mar-19	9:35	

**TABLE 2-4 ANALYSIS BATCHES**

<b>SDG</b>	<b>SAMPLE ID</b>	<b>METHOD BATCH<sup>1</sup> LAB ID</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS TIME</b>	<b>RECEIPT DATE</b>	<b>RECEIPT TIME</b>	<b>SAMPLE DATE</b>	<b>SAMPLE TIME</b>	<b>QC</b>
19-0113	MIHPT35GW_27	R4-E191401-04	17-Apr-19	15:43	2-Apr-19	10:20	29-Mar-19	9:25	
19-0113	MIHPT41GW_24	R4-E191401-05	17-Apr-19	15:43	2-Apr-19	10:20	31-Mar-19	13:25	
19-0113	MIHPT45GW_24	R4-E191401-07	17-Apr-19	15:43	2-Apr-19	10:20	31-Mar-19	13:10	
19-0113	MIHPT45GW_38	R4-E191401-08	17-Apr-19	15:43	2-Apr-19	10:20	31-Mar-19	14:15	
19-0113	MIHPT45GW_46	R4-E191401-09	17-Apr-19	15:43	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT945GW_46	R4-E191401-10	17-Apr-19	15:43	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT34GW_22	R4-E191404-01	17-Apr-19	15:43	3-Apr-19	10:45	1-Apr-19	15:17	
19-0113	MIHPT34GW_26	R4-E191404-02	17-Apr-19	15:43	3-Apr-19	10:45	1-Apr-19	18:00	
19-0113	MIHPT49GW_21	R4-E191404-03	17-Apr-19	15:43	3-Apr-19	10:45	2-Apr-19	10:10	
19-0113	MIHPT49GW_41	R4-E191404-04	17-Apr-19	15:43	3-Apr-19	10:45	2-Apr-19	9:00	
19-0113	MIHPT39GW_30	R4-E191408-05	17-Apr-19	15:43	5-Apr-19	10:45	3-Apr-19	13:20	
19-0113	MIHPT53GW_24	R4-E191502-06	17-Apr-19	15:43	9-Apr-19	10:20	4-Apr-19	12:40	
		<b>CNA:SM 2320B</b>	<b>4-Apr-19</b>	<b>8:08</b>					
		(blank)	4-Apr-19	8:08					
19-0113	MiHPT31GW29	R4-E191309-02	4-Apr-19	8:19	29-Mar-19	10:30	26-Mar-19	18:20	
19-0113	MIHPT29GW_24	R4-E191401-01	4-Apr-19	8:19	2-Apr-19	10:20	29-Mar-19	13:30	
19-0113	MIHPT33GW_29	R4-E191401-02	4-Apr-19	8:19	2-Apr-19	10:20	30-Mar-19	9:35	
19-0113	MIHPT35GW_27	R4-E191401-04	4-Apr-19	8:19	2-Apr-19	10:20	29-Mar-19	9:25	
19-0113	MIHPT41GW_24	R4-E191401-05	4-Apr-19	8:19	2-Apr-19	10:20	31-Mar-19	13:25	
19-0113	MIHPT45GW_24	R4-E191401-07	4-Apr-19	8:19	2-Apr-19	10:20	31-Mar-19	13:10	
19-0113	MIHPT45GW_38	R4-E191401-08	4-Apr-19	8:19	2-Apr-19	10:20	31-Mar-19	14:15	
19-0113	MIHPT45GW_46	R4-E191401-09	4-Apr-19	8:19	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT945GW_46	R4-E191401-10	4-Apr-19	8:19	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT34GW_22	R4-E191404-01	4-Apr-19	8:19	3-Apr-19	10:45	1-Apr-19	15:17	
19-0113	MIHPT34GW_26	R4-E191404-02	4-Apr-19	8:19	3-Apr-19	10:45	1-Apr-19	18:00	
19-0113	MIHPT49GW_21	R4-E191404-03	4-Apr-19	8:19	3-Apr-19	10:45	2-Apr-19	10:10	
19-0113	MIHPT49GW_41	R4-E191404-04	4-Apr-19	8:19	3-Apr-19	10:45	2-Apr-19	9:00	
19-0113	MIHPT39GW_30	R4-E191408-05	9-Apr-19	8:14	5-Apr-19	10:45	3-Apr-19	13:20	
19-0113	MIHPT53GW_24	R4-E191502-06	15-Apr-19	8:08	9-Apr-19	10:20	4-Apr-19	12:40	
		<b>CNA:SM 5310B</b>	<b>17-Apr-19</b>	<b>12:20</b>					
		(blank)	17-Apr-19	12:20					
19-0113	MiHPT31GW29	R4-E191309-02	17-Apr-19	12:20	29-Mar-19	10:30	26-Mar-19	18:20	

TABLE 2-4 ANALYSIS BATCHES

SDG	SAMPLE ID	METHOD BATCH <sup>1</sup> LAB ID	ANALYSIS DATE	ANALYSIS TIME	RECEIPT DATE	RECEIPT TIME	SAMPLE DATE	SAMPLE TIME	QC
19-0113	MIHPT29GW_24	R4-E191401-01	17-Apr-19	13:36	2-Apr-19	10:20	29-Mar-19	13:30	
19-0113	MIHPT33GW_29	R4-E191401-02	17-Apr-19	14:03	2-Apr-19	10:20	30-Mar-19	9:35	
19-0113	MIHPT35GW_27	R4-E191401-04	17-Apr-19	14:20	2-Apr-19	10:20	29-Mar-19	9:25	
19-0113	MIHPT41GW_24	R4-E191401-05	17-Apr-19	14:45	2-Apr-19	10:20	31-Mar-19	13:25	
19-0113	MIHPT45GW_24	R4-E191401-07	17-Apr-19	15:10	2-Apr-19	10:20	31-Mar-19	13:10	
19-0113	MIHPT45GW_38	R4-E191401-08	17-Apr-19	15:37	2-Apr-19	10:20	31-Mar-19	14:15	
19-0113	MIHPT45GW_46	R4-E191401-09	17-Apr-19	16:01	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT945GW_46	R4-E191401-10	17-Apr-19	16:26	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT34GW_22	R4-E191404-01	17-Apr-19	18:01	3-Apr-19	10:45	1-Apr-19	15:17	
19-0113	MIHPT34GW_26	R4-E191404-02	17-Apr-19	19:03	3-Apr-19	10:45	1-Apr-19	18:00	
19-0113	MIHPT49GW_21	R4-E191404-03	17-Apr-19	19:30	3-Apr-19	10:45	2-Apr-19	10:10	
19-0113	MIHPT49GW_41	R4-E191404-04	17-Apr-19	19:55	3-Apr-19	10:45	2-Apr-19	9:00	
19-0113	MIHPT39GW_30	R4-E191408-05	17-Apr-19	20:19	5-Apr-19	10:45	3-Apr-19	13:20	
19-0113	MIHPT53GW_24	R4-E191502-06	17-Apr-19	20:44	9-Apr-19	10:20	4-Apr-19	12:40	
		DMTL:EPA 200.8	25-Apr-19	16:07					
		(blank)	25-Apr-19	16:07					
19-0113	MIHPT34GW_22	R4-E191404-01	25-Apr-19	18:15	3-Apr-19	10:45	1-Apr-19	15:17	
19-0113	MIHPT39GW_30	R4-E191408-05	6-May-19	16:21	5-Apr-19	10:45	3-Apr-19	13:20	
19-0113	MIHPT39GW_23	R4-E191408-04	6-May-19	16:07	5-Apr-19	10:45	3-Apr-19	15:40	
19-0113	MIHPT39GW_40	R4-E191408-06	6-May-19	16:26	5-Apr-19	10:45	3-Apr-19	14:45	
19-0113	MIHPT48GW_24	R4-E191502-03	6-May-19	17:00	9-Apr-19	10:20	4-Apr-19	10:40	
19-0113	MIHPT948GW_24	R4-E191502-05	6-May-19	17:10	9-Apr-19	10:20	4-Apr-19	10:40	
19-0113	MIHPT53GW_35	R4-E191502-07	6-May-19	17:20	9-Apr-19	10:20	4-Apr-19	14:55	
		DMTL:EPA 218.6	9-Apr-19	0:02					
		(blank)	9-Apr-19	0:02					
19-0113	MiHPT31GW29	R4-E191309-02	9-Apr-19	20:32	29-Mar-19	10:30	26-Mar-19	18:20	
19-0113	MIHPT29GW_24	R4-E191401-01	9-Apr-19	20:42	2-Apr-19	10:20	29-Mar-19	13:30	
19-0113	MIHPT33GW_29	R4-E191401-02	9-Apr-19	20:52	2-Apr-19	10:20	30-Mar-19	9:35	
19-0113	MIHPT35GW_27	R4-E191401-04	9-Apr-19	21:32	2-Apr-19	10:20	29-Mar-19	9:25	
19-0113	MIHPT41GW_24	R4-E191401-05	9-Apr-19	21:42	2-Apr-19	10:20	31-Mar-19	13:25	
19-0113	MIHPT45GW_24	R4-E191401-07	9-Apr-19	21:52	2-Apr-19	10:20	31-Mar-19	13:10	
19-0113	MIHPT45GW_38	R4-E191401-08	9-Apr-19	22:02	2-Apr-19	10:20	31-Mar-19	14:15	

TABLE 2-4 ANALYSIS BATCHES

SDG	SAMPLE ID	METHOD BATCH <sup>1</sup> LAB ID	ANALYSIS DATE	ANALYSIS TIME	RECEIPT DATE	RECEIPT TIME	SAMPLE DATE	SAMPLE TIME	QC
19-0113	MIHPT45GW_46	R4-E191401-09	9-Apr-19	22:12	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT945GW_46	R4-E191401-10	9-Apr-19	22:22	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT34GW_22	R4-E191404-01	9-Apr-19	22:52	3-Apr-19	10:45	1-Apr-19	15:17	
19-0113	MIHPT34GW_26	R4-E191404-02	9-Apr-19	23:02	3-Apr-19	10:45	1-Apr-19	18:00	
19-0113	MIHPT49GW_21	R4-E191404-03	9-Apr-19	23:32	3-Apr-19	10:45	2-Apr-19	10:10	
19-0113	MIHPT49GW_41	R4-E191404-04	9-Apr-19	23:42	3-Apr-19	10:45	2-Apr-19	9:00	
19-0113	MIHPT39GW_30	R4-E191408-05	10-Apr-19	0:02	5-Apr-19	10:45	3-Apr-19	13:20	
19-0113	MIHPT53GW_24	R4-E191502-06	10-Apr-19	1:55	9-Apr-19	10:20	4-Apr-19	12:40	
19-0113	MIHPT33GW_50	R4-E191401-03	9-Apr-19	21:22	2-Apr-19	10:20	30-Mar-19	13:10	
19-0113	MIHPT39GW_23	R4-E191408-04	9-Apr-19	23:52	5-Apr-19	10:45	3-Apr-19	15:40	
19-0113	MIHPT39GW_40	R4-E191408-06	10-Apr-19	0:12	5-Apr-19	10:45	3-Apr-19	14:45	
19-0113	MIHPT36GW_24	R4-E191502-01	10-Apr-19	0:22	9-Apr-19	10:20	5-Apr-19	9:05	
19-0113	MIHPT36GW_44	R4-E191502-02	10-Apr-19	0:32	9-Apr-19	10:20	5-Apr-19	9:20	
19-0113	MIHPT48GW_24	R4-E191502-03	10-Apr-19	0:42	9-Apr-19	10:20	4-Apr-19	10:40	
19-0113	MIHPT48GW_45	R4-E191502-04	10-Apr-19	1:12	9-Apr-19	10:20	4-Apr-19	10:10	
19-0113	MIHPT948GW_24	R4-E191502-05	10-Apr-19	1:45	9-Apr-19	10:20	4-Apr-19	10:40	
19-0113	MIHPT53GW_35	R4-E191502-07	10-Apr-19	2:05	9-Apr-19	10:20	4-Apr-19	14:55	
		DMTL:EPA 6010	24-Apr-19	13:55					
		(blank)	24-Apr-19	13:55					
19-0113	MIHPT34GW_22	R4-E191404-01	24-Apr-19	17:33	3-Apr-19	10:45	1-Apr-19	15:17	
19-0113	MIHPT39GW_30	R4-E191408-05	2-May-19	14:03	5-Apr-19	10:45	3-Apr-19	13:20	
19-0113	MIHPT39GW_23	R4-E191408-04	2-May-19	13:55	5-Apr-19	10:45	3-Apr-19	15:40	
19-0113	MIHPT39GW_40	R4-E191408-06	2-May-19	14:06	5-Apr-19	10:45	3-Apr-19	14:45	
19-0113	MIHPT48GW_24	R4-E191502-03	2-May-19	14:21	9-Apr-19	10:20	4-Apr-19	10:40	
19-0113	MIHPT948GW_24	R4-E191502-05	2-May-19	14:39	9-Apr-19	10:20	4-Apr-19	10:40	
19-0113	MIHPT53GW_35	R4-E191502-07	2-May-19	14:45	9-Apr-19	10:20	4-Apr-19	14:55	
		PHYSP:EPA 200.2	4-Apr-19	9:25					
		(blank)	4-Apr-19	9:25					
19-0113	MiHPT29SB20	R4-E191309-01	4-Apr-19	9:25	29-Mar-19	10:30	27-Mar-19	11:25	
19-0113	MIHPT41SB_24	R4-E191401-06	4-Apr-19	9:25	2-Apr-19	10:20	1-Apr-19	9:45	
19-0113	MIHPT49SB_14	R4-E191401-12	4-Apr-19	9:25	2-Apr-19	10:20	1-Apr-19	15:50	
19-0113	MIHPT28SB_5	R4-E191408-02	24-Apr-19	9:45	5-Apr-19	10:45	3-Apr-19	7:45	

TABLE 2-4 ANALYSIS BATCHES

SDG	SAMPLE ID	METHOD BATCH <sup>1</sup> LAB ID	ANALYSIS DATE	ANALYSIS TIME	RECEIPT DATE	RECEIPT TIME	SAMPLE DATE	SAMPLE TIME	QC
19-0113	MIHPT28SB_7	R4-E191408-03	24-Apr-19	9:45	5-Apr-19	10:45	3-Apr-19	8:00	
19-0113	MIHPT53SB_24	R4-E191408-07	24-Apr-19	9:45	5-Apr-19	10:45	3-Apr-19	14:00	
19-0113	MIHPT55SB_5	R4-E191408-08	24-Apr-19	9:45	5-Apr-19	10:45	3-Apr-19	7:25	
19-0113	MIHPT56SB_6	R4-E191408-09	24-Apr-19	9:45	5-Apr-19	10:45	3-Apr-19	16:45	
19-0113	MiHPT35SB29.5	R4-E191309-03	4-Apr-19	9:25	29-Mar-19	10:30	28-Mar-19	11:00	
19-0113	MIHPT45SB_04	R4-E191401-11	4-Apr-19	9:25	2-Apr-19	10:20	1-Apr-19	8:25	
		<b>SVOA:CLP SOM02.4 B</b>	<b>1-Apr-19</b>	<b>11:33</b>					
		(blank)	1-Apr-19	11:33					
19-0117	MIHPT29GW_24	R4-C191701-19	5-Apr-19	12:02	4-Apr-19	0:00	29-Mar-19	13:30	
19-0117	MiHPT31GW29	R4-C191701-21	1-Apr-19	18:21	4-Apr-19	0:00	26-Mar-19	18:20	
19-0117	MIHPT33GW_29	R4-C191701-24	5-Apr-19	12:31	4-Apr-19	0:00	30-Mar-19	9:35	
19-0117	MIHPT34GW_22	R4-C191701-28	5-Apr-19	18:15	4-Apr-19	0:00	1-Apr-19	15:17	
19-0117	MIHPT35GW_27	R4-C191701-33	5-Apr-19	11:33	4-Apr-19	0:00	29-Mar-19	9:25	
19-0117	MIHPT39GW_30	R4-C191701-38	11-Apr-19	12:45	4-Apr-19	0:00	3-Apr-19	13:20	
19-0117	MIHPT41GW_24	R4-C191701-40	5-Apr-19	15:23	4-Apr-19	0:00	31-Mar-19	13:25	
19-0117	MIHPT45GW_24	R4-C191701-44	5-Apr-19	14:25	4-Apr-19	0:00	31-Mar-19	13:10	
19-0117	MIHPT45GW_38	R4-C191701-45	5-Apr-19	14:54	4-Apr-19	0:00	31-Mar-19	14:15	
19-0117	MIHPT45GW_46	R4-C191701-46	5-Apr-19	15:51	4-Apr-19	0:00	31-Mar-19	11:15	
19-0117	MIHPT945GW_46	R4-C191701-47	5-Apr-19	13:57	4-Apr-19	0:00	31-Mar-19	11:15	
19-0117	MIHPT49GW_21	R4-C191701-53	5-Apr-19	18:43	4-Apr-19	0:00	2-Apr-19	10:10	
19-0117	MIHPT49GW_41	R4-C191701-54	5-Apr-19	19:12	4-Apr-19	0:00	2-Apr-19	9:00	
19-0117	MIHPT53GW_24	R4-C191701-59	11-Apr-19	13:14	4-Apr-19	0:00	4-Apr-19	12:40	
		<b>TMTL:EPA 200.8</b>	<b>11-Apr-19</b>	<b>15:21</b>					
		(blank)	11-Apr-19	15:21					
19-0113	MiHPT29SB20	R4-E191309-01	11-Apr-19	15:21	29-Mar-19	10:30	27-Mar-19	11:25	
19-0113	MiHPT31GW29	R4-E191309-02	25-Apr-19	16:17	29-Mar-19	10:30	26-Mar-19	18:20	
19-0113	MIHPT29GW_24	R4-E191401-01	25-Apr-19	16:23	2-Apr-19	10:20	29-Mar-19	13:30	
19-0113	MIHPT33GW_29	R4-E191401-02	25-Apr-19	16:40	2-Apr-19	10:20	30-Mar-19	9:35	
19-0113	MIHPT35GW_27	R4-E191401-04	25-Apr-19	17:02	2-Apr-19	10:20	29-Mar-19	9:25	
19-0113	MIHPT41GW_24	R4-E191401-05	25-Apr-19	17:08	2-Apr-19	10:20	31-Mar-19	13:25	
19-0113	MIHPT41SB_24	R4-E191401-06	11-Apr-19	16:40	2-Apr-19	10:20	1-Apr-19	9:45	
19-0113	MIHPT45GW_24	R4-E191401-07	25-Apr-19	17:13	2-Apr-19	10:20	31-Mar-19	13:10	

TABLE 2-4 ANALYSIS BATCHES

SDG	SAMPLE ID	METHOD BATCH <sup>1</sup> LAB ID	ANALYSIS DATE	ANALYSIS TIME	RECEIPT DATE	RECEIPT TIME	SAMPLE DATE	SAMPLE TIME	QC
19-0113	MIHPT45GW_38	R4-E191401-08	25-Apr-19	17:19	2-Apr-19	10:20	31-Mar-19	14:15	
19-0113	MIHPT45GW_46	R4-E191401-09	25-Apr-19	17:25	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT945GW_46	R4-E191401-10	25-Apr-19	17:30	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT49SB_14	R4-E191401-12	11-Apr-19	16:59	2-Apr-19	10:20	1-Apr-19	15:50	
19-0113	MIHPT34GW_26	R4-E191404-02	25-Apr-19	18:21	3-Apr-19	10:45	1-Apr-19	18:00	
19-0113	MIHPT49GW_21	R4-E191404-03	25-Apr-19	18:26	3-Apr-19	10:45	2-Apr-19	10:10	
19-0113	MIHPT49GW_41	R4-E191404-04	25-Apr-19	18:32	3-Apr-19	10:45	2-Apr-19	9:00	
19-0113	MIHPT28SB_5	R4-E191408-02	30-Apr-19	16:12	5-Apr-19	10:45	3-Apr-19	7:45	
19-0113	MIHPT28SB_7	R4-E191408-03	30-Apr-19	16:17	5-Apr-19	10:45	3-Apr-19	8:00	
19-0113	MIHPT53SB_24	R4-E191408-07	30-Apr-19	16:22	5-Apr-19	10:45	3-Apr-19	14:00	
19-0113	MIHPT55SB_5	R4-E191408-08	30-Apr-19	16:37	5-Apr-19	10:45	3-Apr-19	7:25	
19-0113	MIHPT56SB_6	R4-E191408-09	30-Apr-19	16:51	5-Apr-19	10:45	3-Apr-19	16:45	
19-0113	MIHPT53GW_24	R4-E191502-06	6-May-19	17:15	9-Apr-19	10:20	4-Apr-19	12:40	
19-0113	MiHPT35SB29.5	R4-E191309-03	11-Apr-19	15:26	29-Mar-19	10:30	28-Mar-19	11:00	
19-0113	MIHPT33GW_50	R4-E191401-03	25-Apr-19	16:45	2-Apr-19	10:20	30-Mar-19	13:10	
19-0113	MIHPT45SB_04	R4-E191401-11	11-Apr-19	16:55	2-Apr-19	10:20	1-Apr-19	8:25	
19-0113	RB01MIHPT28	R4-E191408-01	6-May-19	16:02	5-Apr-19	10:45	3-Apr-19	9:30	
19-0113	MIHPT36GW_24	R4-E191502-01	6-May-19	16:41	9-Apr-19	10:20	5-Apr-19	9:05	
19-0113	MIHPT36GW_44	R4-E191502-02	6-May-19	16:56	9-Apr-19	10:20	5-Apr-19	9:20	
19-0113	MIHPT48GW_45	R4-E191502-04	6-May-19	17:05	9-Apr-19	10:20	4-Apr-19	10:10	
	<b>TMTL:EPA 218.6</b>		<b>24-Apr-19</b>	<b>8:27</b>					
	<b>(blank)</b>		<b>24-Apr-19</b>	<b>8:27</b>					
19-0113	MIHPT41SB_24	R4-E191401-06	24-Apr-19	10:20	2-Apr-19	10:20	1-Apr-19	9:45	
19-0113	MIHPT49SB_14	R4-E191401-12	24-Apr-19	10:40	2-Apr-19	10:20	1-Apr-19	15:50	
19-0113	MIHPT28SB_5	R4-E191408-02	24-Apr-19	10:50	5-Apr-19	10:45	3-Apr-19	7:45	
19-0113	MIHPT28SB_7	R4-E191408-03	24-Apr-19	11:00	5-Apr-19	10:45	3-Apr-19	8:00	
19-0113	MIHPT53SB_24	R4-E191408-07	24-Apr-19	11:10	5-Apr-19	10:45	3-Apr-19	14:00	
19-0113	MIHPT55SB_5	R4-E191408-08	24-Apr-19	11:20	5-Apr-19	10:45	3-Apr-19	7:25	
19-0113	MiHPT35SB29.5	R4-E191309-03	24-Apr-19	8:27	29-Mar-19	10:30	28-Mar-19	11:00	
19-0113	MIHPT45SB_04	R4-E191401-11	24-Apr-19	8:28	2-Apr-19	10:20	1-Apr-19	8:25	
	<b>TMTL:EPA 6010</b>		<b>10-Apr-19</b>	<b>13:52</b>					

TABLE 2-4 ANALYSIS BATCHES

SDG	SAMPLE ID	METHOD BATCH <sup>1</sup> LAB ID	ANALYSIS DATE	ANALYSIS TIME	RECEIPT DATE	RECEIPT TIME	SAMPLE DATE	SAMPLE TIME	QC
		(blank)	10-Apr-19	13:52					
19-0113	MiHPT29SB20	R4-E191309-01	10-Apr-19	16:13	29-Mar-19	10:30	27-Mar-19	11:25	
19-0113	MiHPT31GW29	R4-E191309-02	24-Apr-19	16:31	29-Mar-19	10:30	26-Mar-19	18:20	
19-0113	MIHPT29GW_24	R4-E191401-01	24-Apr-19	16:34	2-Apr-19	10:20	29-Mar-19	13:30	
19-0113	MIHPT33GW_29	R4-E191401-02	24-Apr-19	16:43	2-Apr-19	10:20	30-Mar-19	9:35	
19-0113	MIHPT35GW_27	R4-E191401-04	24-Apr-19	16:49	2-Apr-19	10:20	29-Mar-19	9:25	
19-0113	MIHPT41GW_24	R4-E191401-05	24-Apr-19	16:52	2-Apr-19	10:20	31-Mar-19	13:25	
19-0113	MIHPT41SB_24	R4-E191401-06	10-Apr-19	17:08	2-Apr-19	10:20	1-Apr-19	9:45	
19-0113	MIHPT45GW_24	R4-E191401-07	24-Apr-19	16:55	2-Apr-19	10:20	31-Mar-19	13:10	
19-0113	MIHPT45GW_38	R4-E191401-08	24-Apr-19	16:58	2-Apr-19	10:20	31-Mar-19	14:15	
19-0113	MIHPT45GW_46	R4-E191401-09	24-Apr-19	17:12	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT945GW_46	R4-E191401-10	24-Apr-19	17:15	2-Apr-19	10:20	31-Mar-19	11:15	
19-0113	MIHPT49SB_14	R4-E191401-12	10-Apr-19	17:14	2-Apr-19	10:20	1-Apr-19	15:50	
19-0113	MIHPT34GW_26	R4-E191404-02	24-Apr-19	17:35	3-Apr-19	10:45	1-Apr-19	18:00	
19-0113	MIHPT49GW_21	R4-E191404-03	24-Apr-19	17:38	3-Apr-19	10:45	2-Apr-19	10:10	
19-0113	MIHPT49GW_41	R4-E191404-04	24-Apr-19	17:41	3-Apr-19	10:45	2-Apr-19	9:00	
19-0113	MIHPT28SB_5	R4-E191408-02	1-May-19	16:03	5-Apr-19	10:45	3-Apr-19	7:45	
19-0113	MIHPT28SB_7	R4-E191408-03	1-May-19	16:06	5-Apr-19	10:45	3-Apr-19	8:00	
19-0113	MIHPT53SB_24	R4-E191408-07	1-May-19	16:09	5-Apr-19	10:45	3-Apr-19	14:00	
19-0113	MIHPT55SB_5	R4-E191408-08	1-May-19	16:12	5-Apr-19	10:45	3-Apr-19	7:25	
19-0113	MIHPT56SB_6	R4-E191408-09	1-May-19	16:21	5-Apr-19	10:45	3-Apr-19	16:45	
19-0113	MIHPT53GW_24	R4-E191502-06	2-May-19	14:42	9-Apr-19	10:20	4-Apr-19	12:40	
19-0113	MiHPT35SB29.5	R4-E191309-03	10-Apr-19	16:16	29-Mar-19	10:30	28-Mar-19	11:00	
19-0113	MIHPT33GW_50	R4-E191401-03	24-Apr-19	16:46	2-Apr-19	10:20	30-Mar-19	13:10	
19-0113	MIHPT45SB_04	R4-E191401-11	10-Apr-19	17:11	2-Apr-19	10:20	1-Apr-19	8:25	
19-0113	RB01MIHPT28	R4-E191408-01	2-May-19	13:52	5-Apr-19	10:45	3-Apr-19	9:30	
19-0113	MIHPT36GW_24	R4-E191502-01	2-May-19	14:09	9-Apr-19	10:20	5-Apr-19	9:05	
19-0113	MIHPT36GW_44	R4-E191502-02	2-May-19	14:18	9-Apr-19	10:20	5-Apr-19	9:20	
19-0113	MIHPT48GW_45	R4-E191502-04	2-May-19	14:24	9-Apr-19	10:20	4-Apr-19	10:10	
		VOA:CLP SOM02.4 V	28-Mar-19	0:06					
		(blank)	28-Mar-19	0:06					
19-0117	RB01MIHPT28	R4-C191701-01	5-Apr-19	21:16	4-Apr-19	0:00	3-Apr-19	9:30	

TABLE 2-4 ANALYSIS BATCHES

SDG	SAMPLE ID	METHOD BATCH <sup>1</sup> LAB ID	ANALYSIS DATE	ANALYSIS TIME	RECEIPT DATE	RECEIPT TIME	SAMPLE DATE	SAMPLE TIME	QC
19-0117	TB01GW032619	R4-C191701-02	29-Mar-19	16:22	4-Apr-19	0:00	26-Mar-19	8:15	
19-0117	TB01SB032619	R4-C191701-03	28-Mar-19	20:08	4-Apr-19	0:00	26-Mar-19	8:15	
19-0117	TB02GW032719	R4-C191701-04	29-Mar-19	16:44	4-Apr-19	0:00	27-Mar-19	17:00	
19-0117	TB02SB032819	R4-C191701-05	30-Mar-19	12:33	4-Apr-19	0:00	28-Mar-19	8:15	
19-0117	TB03GW032919	R4-C191701-06	2-Apr-19	23:44	4-Apr-19	0:00	29-Mar-19	8:00	
19-0117	TB03SB032919	R4-C191701-07	1-Apr-19	10:54	4-Apr-19	0:00	29-Mar-19	12:30	
19-0117	TB04GW040119	R4-C191701-08	4-Apr-19	19:20	4-Apr-19	0:00	1-Apr-19	13:00	
19-0117	TB04SB040119	R4-C191701-09	3-Apr-19	15:19	4-Apr-19	0:00	1-Apr-19	7:30	
19-0117	TB05GW040319	R4-C191701-10	5-Apr-19	21:37	4-Apr-19	0:00	3-Apr-19	7:00	
19-0117	TB05SB040319	R4-C191701-11	5-Apr-19	11:02	4-Apr-19	0:00	3-Apr-19	7:00	
19-0117	TB06GW040419	R4-C191701-12	8-Apr-19	11:15	4-Apr-19	0:00	4-Apr-19	7:00	
19-0117	MIHPT28SB_5	R4-C191701-13	5-Apr-19	11:46	4-Apr-19	0:00	3-Apr-19	7:45	
19-0117	MIHPT28SB_7	R4-C191701-14	5-Apr-19	12:08	4-Apr-19	0:00	3-Apr-19	8:00	
19-0117	MiHPT29GW44	R4-C191701-15	29-Mar-19	17:49	4-Apr-19	0:00	27-Mar-19	19:15	
19-0117	MiHPT29SB20	R4-C191701-16	28-Mar-19	23:11	4-Apr-19	0:00	27-Mar-19	11:25	
19-0117	MiHPT29SB29	R4-C191701-17	28-Mar-19	23:34	4-Apr-19	0:00	27-Mar-19	11:35	
19-0117	MiHPT29SB52	R4-C191701-18	28-Mar-19	23:58	4-Apr-19	0:00	27-Mar-19	13:00	
19-0117	MIHPT29GW_24	R4-C191701-19	2-Apr-19	12:04	4-Apr-19	0:00	29-Mar-19	13:30	
19-0117	MiHPT31GW25	R4-C191701-20	29-Mar-19	17:06	4-Apr-19	0:00	26-Mar-19	17:55	
19-0117	MiHPT31GW29	R4-C191701-21	29-Mar-19	17:27	4-Apr-19	0:00	26-Mar-19	18:20	
19-0117	MiHPT31SB05	R4-C191701-22	28-Mar-19	22:47	4-Apr-19	0:00	27-Mar-19	16:30	
19-0117	MIHPT33GW_21	R4-C191701-23	3-Apr-19	11:17	4-Apr-19	0:00	30-Mar-19	13:25	
19-0117	MIHPT33GW_29	R4-C191701-24	3-Apr-19	12:47	4-Apr-19	0:00	30-Mar-19	9:35	
19-0117	MIHPT33GW_50	R4-C191701-25	2-Apr-19	23:22	4-Apr-19	0:00	30-Mar-19	13:10	
19-0117	MIHPT33SB_05	R4-C191701-26	1-Apr-19	11:17	4-Apr-19	0:00	29-Mar-19	13:00	
19-0117	MIHPT33SB_27	R4-C191701-27	1-Apr-19	11:39	4-Apr-19	0:00	29-Mar-19	14:15	
19-0117	MIHPT34GW_22	R4-C191701-28	5-Apr-19	14:41	4-Apr-19	0:00	1-Apr-19	15:17	
19-0117	MIHPT34GW_26	R4-C191701-29	5-Apr-19	12:30	4-Apr-19	0:00	1-Apr-19	18:00	
19-0117	MiHPT35SB23	R4-C191701-30	30-Mar-19	12:56	4-Apr-19	0:00	28-Mar-19	10:45	
19-0117	MiHPT35SB29.5	R4-C191701-31	30-Mar-19	13:18	4-Apr-19	0:00	28-Mar-19	11:00	
19-0117	MiHPT35SB53	R4-C191701-32	30-Mar-19	13:40	4-Apr-19	0:00	28-Mar-19	12:25	
19-0117	MIHPT35GW_27	R4-C191701-33	3-Apr-19	0:06	4-Apr-19	0:00	29-Mar-19	9:25	

TABLE 2-4 ANALYSIS BATCHES

SDG	SAMPLE ID	METHOD BATCH <sup>1</sup> LAB ID	ANALYSIS DATE	ANALYSIS TIME	RECEIPT DATE	RECEIPT TIME	SAMPLE DATE	SAMPLE TIME	QC
19-0117	MIHPT35GW_37	R4-C191701-34	2-Apr-19	22:18	4-Apr-19	0:00	29-Mar-19	9:45	
19-0117	MIHPT36GW_24	R4-C191701-35	8-Apr-19	14:56	4-Apr-19	0:00	5-Apr-19	9:05	
19-0117	MIHPT36GW_44	R4-C191701-36	8-Apr-19	16:03	4-Apr-19	0:00	5-Apr-19	9:20	
19-0117	MIHPT39GW_23	R4-C191701-37	5-Apr-19	22:43	4-Apr-19	0:00	3-Apr-19	15:40	
19-0117	MIHPT39GW_30	R4-C191701-38	5-Apr-19	21:59	4-Apr-19	0:00	3-Apr-19	13:20	
19-0117	MIHPT39GW_40	R4-C191701-39	5-Apr-19	22:21	4-Apr-19	0:00	3-Apr-19	14:45	
19-0117	MIHPT41GW_24	R4-C191701-40	3-Apr-19	10:56	4-Apr-19	0:00	31-Mar-19	13:25	
19-0117	MIHPT41GW_36	R4-C191701-41	3-Apr-19	12:25	4-Apr-19	0:00	31-Mar-19	14:15	
19-0117	MIHPT41SB_05	R4-C191701-42	3-Apr-19	15:41	4-Apr-19	0:00	1-Apr-19	7:55	
19-0117	MIHPT41SB_24	R4-C191701-43	3-Apr-19	16:47	4-Apr-19	0:00	1-Apr-19	9:45	
19-0117	MIHPT45GW_24	R4-C191701-44	3-Apr-19	0:27	4-Apr-19	0:00	31-Mar-19	13:10	
19-0117	MIHPT45GW_38	R4-C191701-45	3-Apr-19	0:49	4-Apr-19	0:00	31-Mar-19	14:15	
19-0117	MIHPT45GW_46	R4-C191701-46	3-Apr-19	13:30	4-Apr-19	0:00	31-Mar-19	11:15	
19-0117	MIHPT945GW_46	R4-C191701-47	3-Apr-19	13:09	4-Apr-19	0:00	31-Mar-19	11:15	
19-0117	MIHPT45SB_04	R4-C191701-48	3-Apr-19	16:03	4-Apr-19	0:00	1-Apr-19	8:25	
19-0117	MIHPT45SB_05	R4-C191701-49	3-Apr-19	16:25	4-Apr-19	0:00	1-Apr-19	8:35	
19-0117	MIHPT48GW_24	R4-C191701-50	8-Apr-19	11:59	4-Apr-19	0:00	4-Apr-19	10:40	
19-0117	MIHPT48GW_45	R4-C191701-51	8-Apr-19	11:37	4-Apr-19	0:00	4-Apr-19	10:10	
19-0117	MIHPT948GW_24	R4-C191701-52	8-Apr-19	12:21	4-Apr-19	0:00	4-Apr-19	10:40	
19-0117	MIHPT49GW_21	R4-C191701-53	5-Apr-19	12:08	4-Apr-19	0:00	2-Apr-19	10:10	
19-0117	MIHPT49GW_41	R4-C191701-54	5-Apr-19	11:46	4-Apr-19	0:00	2-Apr-19	9:00	
19-0117	MIHPT49SB_14	R4-C191701-55	3-Apr-19	14:57	4-Apr-19	0:00	1-Apr-19	15:50	
19-0117	MIHPT50SB_2.5	R4-C191701-56	1-Apr-19	12:01	4-Apr-19	0:00	29-Mar-19	15:30	
19-0117	MIHPT50SB_4	R4-C191701-57	1-Apr-19	12:23	4-Apr-19	0:00	29-Mar-19	15:40	
19-0117	MIHPT50SB_5.2	R4-C191701-58	1-Apr-19	12:45	4-Apr-19	0:00	29-Mar-19	15:55	
19-0117	MIHPT53GW_24	R4-C191701-59	8-Apr-19	12:43	4-Apr-19	0:00	4-Apr-19	12:40	
19-0117	MIHPT53GW_35	R4-C191701-60	8-Apr-19	13:50	4-Apr-19	0:00	4-Apr-19	14:55	
19-0117	MIHPT53SB_24	R4-C191701-61	5-Apr-19	12:30	4-Apr-19	0:00	3-Apr-19	14:00	
19-0117	MIHPT55SB_5	R4-C191701-62	5-Apr-19	11:24	4-Apr-19	0:00	3-Apr-19	7:25	
19-0117	MIHPT56SB_6	R4-C191701-63	5-Apr-19	12:53	4-Apr-19	0:00	3-Apr-19	16:45	

TABLE 2-4 ANALYSIS BATCHES

SDG	SAMPLE ID	METHOD BATCH <sup>1</sup> LAB ID	ANALYSIS DATE	ANALYSIS TIME	RECEIPT DATE	RECEIPT TIME	SAMPLE DATE	SAMPLE TIME	QC
		VOA:CLP VOA	28-Mar-19	10:54					
		(blank)	28-Mar-19	10:54					
19-0117	TB01SB032619	R4-C191701-03	28-Mar-19	20:08	4-Apr-19	0:00	26-Mar-19	8:15	
19-0117	TB02SB032819	R4-C191701-05	30-Mar-19	12:33	4-Apr-19	0:00	28-Mar-19	8:15	
19-0117	TB03SB032919	R4-C191701-07	1-Apr-19	10:54	4-Apr-19	0:00	29-Mar-19	12:30	
19-0117	TB04SB040119	R4-C191701-09	3-Apr-19	15:19	4-Apr-19	0:00	1-Apr-19	7:30	
19-0117	TB05SB040319	R4-C191701-11	5-Apr-19	11:02	4-Apr-19	0:00	3-Apr-19	7:00	
19-0117	MIHPT28SB_5	R4-C191701-13	5-Apr-19	11:46	4-Apr-19	0:00	3-Apr-19	7:45	
19-0117	MIHPT28SB_7	R4-C191701-14	5-Apr-19	12:08	4-Apr-19	0:00	3-Apr-19	8:00	
19-0117	MiHPT29SB20	R4-C191701-16	28-Mar-19	23:11	4-Apr-19	0:00	27-Mar-19	11:25	
19-0117	MiHPT29SB29	R4-C191701-17	28-Mar-19	23:34	4-Apr-19	0:00	27-Mar-19	11:35	
19-0117	MiHPT29SB52	R4-C191701-18	28-Mar-19	23:58	4-Apr-19	0:00	27-Mar-19	13:00	
19-0117	MiHPT31SB05	R4-C191701-22	28-Mar-19	22:47	4-Apr-19	0:00	27-Mar-19	16:30	
19-0117	MIHPT33SB_05	R4-C191701-26	1-Apr-19	11:17	4-Apr-19	0:00	29-Mar-19	13:00	
19-0117	MIHPT33SB_27	R4-C191701-27	1-Apr-19	11:39	4-Apr-19	0:00	29-Mar-19	14:15	
19-0117	MiHPT35SB23	R4-C191701-30	30-Mar-19	12:56	4-Apr-19	0:00	28-Mar-19	10:45	
19-0117	MiHPT35SB29.5	R4-C191701-31	30-Mar-19	13:18	4-Apr-19	0:00	28-Mar-19	11:00	
19-0117	MiHPT35SB53	R4-C191701-32	30-Mar-19	13:40	4-Apr-19	0:00	28-Mar-19	12:25	
19-0117	MIHPT41SB_05	R4-C191701-42	3-Apr-19	15:41	4-Apr-19	0:00	1-Apr-19	7:55	
19-0117	MIHPT41SB_24	R4-C191701-43	3-Apr-19	16:47	4-Apr-19	0:00	1-Apr-19	9:45	
19-0117	MIHPT45SB_04	R4-C191701-48	3-Apr-19	16:03	4-Apr-19	0:00	1-Apr-19	8:25	
19-0117	MIHPT45SB_05	R4-C191701-49	3-Apr-19	16:25	4-Apr-19	0:00	1-Apr-19	8:35	
19-0117	MIHPT49SB_14	R4-C191701-55	3-Apr-19	14:57	4-Apr-19	0:00	1-Apr-19	15:50	
19-0117	MIHPT50SB_2.5	R4-C191701-56	1-Apr-19	12:01	4-Apr-19	0:00	29-Mar-19	15:30	
19-0117	MIHPT50SB_4	R4-C191701-57	1-Apr-19	12:23	4-Apr-19	0:00	29-Mar-19	15:40	
19-0117	MIHPT50SB_5.2	R4-C191701-58	1-Apr-19	12:45	4-Apr-19	0:00	29-Mar-19	15:55	

**TABLE 2-4 ANALYSIS BATCHES**

SDG	SAMPLE ID	METHOD BATCH <sup>1</sup> LAB ID	ANALYSIS DATE	ANALYSIS TIME	RECEIPT DATE	RECEIPT TIME	SAMPLE DATE	SAMPLE TIME	QC
19-0117	MIHPT53SB_24	R4-C191701-61	5-Apr-19	12:30	4-Apr-19	0:00	3-Apr-19	14:00	
19-0117	MIHPT55SB_5	R4-C191701-62	5-Apr-19	11:24	4-Apr-19	0:00	3-Apr-19	7:25	
19-0117	MIHPT56SB_6	R4-C191701-63	5-Apr-19	12:53	4-Apr-19	0:00	3-Apr-19	16:45	

Notes:

1 - Data packages from an EPA or CLP laboratory will not have a batch ID available and will display "(blank)".

C - Chain of Custody issue.

H - Hold time has been exceeded.

P - Preservation issue.

QC - Quality Control criteria may require review.

S - Sample acquisition, handling, or shipping issue

T - Temperature issue

**TABLE 3-1 FIELD DUPLICATES**

METHOD ANALYTE	SET1FD1		SET1FD2		RPD	QC
	MIHPT45GW_46	MIHPT945GW_46	30.0			
	Result	MRL	Result	MRL		
<b>CNA:EPA 300.0</b>						
Sulfate as SO4	43	0.1	42	0.1	2.4	N/A
<b>CNA:SM 2320B</b>						
Alkalinity, Total (as CaCO3)	55	1	55	1	0.0	N/A
<b>CNA:SM 5310B</b>						
Total Organic Carbon	2.7	1	1.7	1	45.5	J
<b>DMTL:EPA 200.8</b>						
Arsenic	NA		NA		N/A	N/A
<b>DMTL:EPA 6010</b>						
Barium	NA		NA		N/A	N/A
Calcium	NA		NA		N/A	N/A
Iron	NA		NA		N/A	N/A
Magnesium	NA		NA		N/A	N/A
Manganese	NA		NA		N/A	N/A
Potassium	NA		NA		N/A	N/A
Zinc	NA		NA		N/A	N/A
Sodium	NA		NA		N/A	N/A
Strontium	NA		NA		N/A	N/A
<b>SVOA:CLP SOM02.4 B</b>						
Unidentified Compound(s)	NJ		20		N/A	N/A
<b>TMTL:EPA 200.8</b>						
Arsenic	2.9	0.5	2.8	0.5	3.5	N/A
<b>TMTL:EPA 6010</b>						
Aluminum	150	100	120	100	22.2	N/A
Barium	130	5	130	5	0.0	N/A
Calcium	13000	250	13000	250	0.0	N/A
Iron	8300	100	8200	100	1.2	N/A
Magnesium	5500	250	5500	250	0.0	N/A
Manganese	310	5	310	5	0.0	N/A
Potassium	2700	1000	2700	1000	0.0	N/A
Zinc	16	10	16	10	0.0	N/A
Sodium	20000	1000	20000	1000	0.0	N/A
Strontium	260	5	270	5	3.8	N/A
Titanium	6.1	5	ND	5	19.8	N/A
<b>VOA:CLP SOM02.4 V</b>						
cis-1,2-Dichloroethene	1100	100	1000	100	9.5	N/A
trans-1,2-Dichloroethene	2.3	5	2.2	5	4.4	N/A
Trichloroethene (Trichloroethylene)	1300	100	1200	100	8.0	N/A
Vinyl chloride	ND		0.98	5	N/A	N/A
1,1-Dichloroethene (1,1-Dichloroethylene)	3.2	5	3.5	5	9.0	N/A

**TABLE 3-1 FIELD DUPLICATES**

METHOD ANALYTE	SET2FD1		SET2FD2		RPD	QC
	MIHPT48GW_24	MIHPT948GW_24	Result	MRL		
<b>CNA:EPA 300.0</b>						
Sulfate as SO4	NA		NA		N/A	N/A
<b>CNA:SM 2320B</b>						
Alkalinity, Total (as CaCO3)	NA		NA		N/A	N/A
<b>CNA:SM 5310B</b>						
Total Organic Carbon	NA		NA		N/A	N/A
<b>DMTL:EPA 200.8</b>						
Arsenic	0.6	0.5	0.52	0.5	14.3	N/A
<b>DMTL:EPA 6010</b>						
Barium	69	5	71	5	2.9	N/A
Calcium	5000	250	5000	250	0.0	N/A
Iron	3200	100	3200	100	0.0	N/A
Magnesium	2200	250	2200	250	0.0	N/A
Manganese	130	5	140	5	7.4	N/A
Potassium	2300	1000	2300	1000	0.0	N/A
Zinc	27	10	25	10	7.7	N/A
Sodium	22000	1000	22000	1000	0.0	N/A
Strontium	130	5	130	5	0.0	N/A
<b>SVOA:CLP SOM02.4 B</b>						
Unidentified Compound(s)	NA		NA		N/A	N/A
<b>TMTL:EPA 200.8</b>						
Arsenic	NA		NA		N/A	N/A
<b>TMTL:EPA 6010</b>						
Aluminum	NA		NA		N/A	N/A
Barium	NA		NA		N/A	N/A
Calcium	NA		NA		N/A	N/A
Iron	NA		NA		N/A	N/A
Magnesium	NA		NA		N/A	N/A
Manganese	NA		NA		N/A	N/A
Potassium	NA		NA		N/A	N/A
Zinc	NA		NA		N/A	N/A
Sodium	NA		NA		N/A	N/A
Strontium	NA		NA		N/A	N/A
Titanium	NA		NA		N/A	N/A
<b>VOA:CLP SOM02.4 V</b>						
cis-1,2-Dichloroethene	1.7	5	1.5	5	12.5	N/A
trans-1,2-Dichloroethene	ND		ND		N/A	N/A
Trichloroethene (Trichloroethylene)	2	5	1.9	5	5.1	N/A
Vinyl chloride	ND		ND		N/A	N/A
1,1-Dichloroethene (1,1-Dichloroethylene)	ND		ND		N/A	N/A

**TABLE 3-1 FIELD DUPLICATES**

**Notes**

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 - detection < MRL. Analyte pairs in which one is a detect and the other is non-detect or below the reporting limit will use the reporting limit as a substitution for the calculation. Analyte pairs in which both are below the reporting limit will not be calculated.

 - RPD > matrix acceptance criteria

NA - Not analyzed

ND - Not detected

N/A - Not applicable. RPD lower than acceptance criteria, both results lower than the MRL, or TICs.

**TABLE 3-2a FIELD BLANK ASSOCIATIONS**

Sample ID <sup>1</sup>	Sample Date	Sample Time	Related Blank Sample	Field/QC
TB01GW032619	26-Mar-19	8:15	N/A	TB
TB01SB032619	26-Mar-19	8:15	N/A	TB
MiHPT31GW25	26-Mar-19	17:55	TB01GW032619	Field
MiHPT31GW29	26-Mar-19	18:20	TB01GW032619	Field
MiHPT29SB20	27-Mar-19	11:25	TB01SB032619	Field
MiHPT29SB29	27-Mar-19	11:35	TB01SB032619	Field
MiHPT29SB52	27-Mar-19	13:00	TB01SB032619	Field
MiHPT31SB05	27-Mar-19	16:30	TB01SB032619	Field
TB02GW032719	27-Mar-19	17:00	N/A	TB
MiHPT29GW44	27-Mar-19	19:15	TB02GW032719	Field
TB02SB032819	28-Mar-19	8:15	N/A	TB
MiHPT35SB23	28-Mar-19	10:45	TB02SB032819	Field
MiHPT35SB29.5	28-Mar-19	11:00	TB02SB032819	Field
MiHPT35SB53	28-Mar-19	12:25	TB02SB032819	Field
TB03GW032919	29-Mar-19	8:00	N/A	TB
MIHPT35GW_27	29-Mar-19	9:25	TB03GW032919	Field
MIHPT35GW_37	29-Mar-19	9:45	TB03GW032919	Field
TB03SB032919	29-Mar-19	12:30	N/A	TB
MIHPT33SB_05	29-Mar-19	13:00	TB03SB032919	Field
MIHPT29GW_24	29-Mar-19	13:30	TB03GW032919	Field
MIHPT33SB_27	29-Mar-19	14:15	TB03SB032919	Field
MIHPT50SB_2.5	29-Mar-19	15:30	TB03SB032919	Field
MIHPT50SB_4	29-Mar-19	15:40	TB03SB032919	Field
MIHPT50SB_5.2	29-Mar-19	15:55	TB03SB032919	Field
MIHPT33GW_29	30-Mar-19	9:35	TB03SB032919	Field
MIHPT33GW_50	30-Mar-19	13:10	TB03SB032919	Field
MIHPT33GW_21	30-Mar-19	13:25	TB03SB032919	Field
MIHPT45GW_46	31-Mar-19	11:15	TB03SB032919	SET1FD1
MIHPT945GW_46	31-Mar-19	11:15	TB03SB032919	SET1FD2
MIHPT45GW_24	31-Mar-19	13:10	TB03SB032919	Field
MIHPT41GW_24	31-Mar-19	13:25	TB03SB032919	Field
MIHPT45GW_38	31-Mar-19	14:15	TB03SB032919	Field
MIHPT41GW_36	31-Mar-19	14:15	TB03SB032919	Field
TB04SB040119	1-Apr-19	7:30	N/A	TB
MIHPT41SB_05	1-Apr-19	7:55	TB04SB040119	Field
MIHPT45SB_04	1-Apr-19	8:25	TB04SB040119	Field
MIHPT45SB_05	1-Apr-19	8:35	TB04SB040119	Field
MIHPT41SB_24	1-Apr-19	9:45	TB04SB040119	Field
TB04GW040119	1-Apr-19	13:00	N/A	TB
MIHPT34GW_22	1-Apr-19	15:17	TB04GW040119	Field
MIHPT49SB_14	1-Apr-19	15:50	TB04SB040119	Field
MIHPT34GW_26	1-Apr-19	18:00	TB04GW040119	Field
MIHPT49GW_41	2-Apr-19	9:00	TB04GW040119	Field

**TABLE 3-2a FIELD BLANK ASSOCIATIONS**

MIHPT49GW_21	2-Apr-19	10:10	TB04GW040119	Field
TB05GW040319	3-Apr-19	7:00	N/A	TB
TB05SB040319	3-Apr-19	7:00	N/A	TB
MIHPT55SB_5	3-Apr-19	7:25	TB05SB040319	Field
MIHPT28SB_5	3-Apr-19	7:45	TB05SB040319	Field
MIHPT28SB_7	3-Apr-19	8:00	TB05SB040319	Field
RB01MIHPT28	3-Apr-19	9:30	N/A	EB
MIHPT39GW_30	3-Apr-19	13:20	TB05GW040319	Field
MIHPT53SB_24	3-Apr-19	14:00	TB05SB040319, RB01MIHPT28	Field
MIHPT39GW_40	3-Apr-19	14:45	TB05GW040319	Field
MIHPT39GW_23	3-Apr-19	15:40	TB05GW040319	Field
MIHPT56SB_6	3-Apr-19	16:45	TB05SB040319	Field
TB06GW040419	4-Apr-19	7:00	N/A	TB
MIHPT48GW_45	4-Apr-19	10:10	TB06GW040419	Field
MIHPT48GW_24	4-Apr-19	10:40	TB06GW040419	SET2FD1
MIHPT948GW_24	4-Apr-19	10:40	TB06GW040419	SET2FD2
MIHPT53GW_24	4-Apr-19	12:40	TB06GW040419	Field
MIHPT53GW_35	4-Apr-19	14:55	TB06GW040419	Field
MIHPT36GW_24	5-Apr-19	9:05	TB06GW040419	Field
MIHPT36GW_44	5-Apr-19	9:20	TB06GW040419	Field

Notes:

- Field QC Samples

1 - Samples ordered by date and time the sample was acquired.

N/A - Not Applicable. Sample is a QC sample itself or there are no QC sample associations.

TABLE 3-3a EPA DATA VALIDATION SUMMARY

SDG METHOD QUALIFIER ANALYTE	COUNT OF QUALIFIERS																	
	MiHPT29 SB20	MiHPT31 GW29	MiHPT29 GW_24	MIHPT33 GW_29	MIHPT35 GW_27	MIHPT41 GW_24	MIHPT41 SB_24	MIHPT45 GW_38	MIHPT45 GW_46	MIHPT94 5GW_46	MIHPT49 SB_14	MIHPT34 GW_22	MIHPT34 GW_26	MIHPT49 GW_21	MIHPT49 GW_41	MIHPT28 SB_5	MIHPT28 SB_7	
19-0113																		
CNA:SM 5310B		1																
J,QM-1			1															
Total Organic Carbon			1															
TMTL:EPA 200.8																		
J,QR-2																		
Selenium																		
U,J,QM-1																		
Antimony																		
TMTL:EPA 6010																		
J,QR-2	1											1						
Manganese	1											1						
U,B-2															1			
Iron															1			
U,J,QM-1																		
Molybdenum																		
DMTL:EPA 6010																		
U,B-2													1					
Iron													1					
19-0117																		
VOA:CLP SOM02.4 V																		
U,J,QM-1																		
1,1-Dichloroethene (1,1-Dichloroethylene)																		
U,J,QC-3	2	2	2	2	2	2		2	2	2	2	2	2	2	2	2	2	
Bromomethane	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	
Chloromethane	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	
U,J,CLP25	2						1											
cis-1,3-Dichloropropene	1						1											
1,1,1-Trichloroethane	1																	
U,J,QC-1			1	1	1			1	1	1	1	1						
Acetone			1	1	1			1	1	1	1	1						
NJ,CLP15																1	1	
Cyclotetrasiloxane, octamethyl-.alpha.-Pinene																1		
J,CLP15																1	1	
Unidentified Compound(s)																1	1	
J,CLP01	2	1	2	3	2			2	2	2	3		1	3	1			
cis-1,2-Dichloroethene																		
trans-1,2-Dichloroethene	1			1	1			1	1	1	1		1	1	1	1		
Methyl Butyl Ketone																		
Vinyl chloride			1	1							1		1					
Carbon disulfide																		
1,1-Dichloroethene (1,1-Dichloroethylene)	1	1	1	1	1			1	1	1	1		1	1				
Trichloroethene (Trichloroethylene)																		
U,J,QS-3							8											
1,4-Dichlorobenzene																		
1,2-Dibromoethane (EDB)							1											
1,2-Dichloroethane							1											

TABLE 3-3a EPA DATA VALIDATION SUMMARY

SDG METHOD QUALIFIER ANALYTE	COUNT OF QUALIFIERS																	
	MiHPT29 SB20	MiHPT31 GW29	MiHPT29 GW_24	MIHPT33 GW_29	MIHPT35 GW_27	MIHPT41 GW_24	MIHPT41 SB_24	MIHPT45 GW_24	MIHPT45 GW_38	MIHPT45 GW_46	MIHPT94 5GW_46	MIHPT49 SB_14	MIHPT34 GW_22	MIHPT34 GW_26	MIHPT49 GW_21	MIHPT49 GW_41	MIHPT28 SB_5	MIHPT28 SB_7
Chlorobenzene																		
1,2,4-Trichlorobenzene																		
Methyl T-Butyl Ether (MTBE)								1										
1,3-Dichlorobenzene																		
Carbon Tetrachloride								1										
Methylene Chloride								1										
Trichlorofluoromethane (Freon 11)								1										
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)									1									
Methyl Acetate									1									
1,2,3-Trichlorobenzene																		
1,2-Dichlorobenzene																		
U,J,CLP25,QS-3								1										
1,1,1-Trichloroethane								1										
SVOA:CLP SOM02.4 B																		
U,J,QC-3		5	5	4	5	5			5	5	5	5			5	5	5	
Fluorene		1	1	1	1	1			1	1	1	1			1	1	1	
4-Chlorophenyl phenyl ether		1	1	1	1	1			1	1	1	1			1	1	1	
Acenaphthene		1	1		1	1			1	1	1	1			1	1	1	
2,4-Dinitrophenol		1	1	1	1	1			1	1	1	1			1	1	1	
Hexachlorocyclopentadiene (HCCP)		1	1	1	1	1			1	1	1	1			1	1	1	
U,J,CLP25		2	2	2	2	2			2	2	2	2			1	1	1	
Di-n-octylphthalate		1	1	1	1	1			1	1	1	1			1	1	1	
Dibenzo(a,h)anthracene		1	1	1	1	1			1	1	1	1						
U,J,QC-1			1	1	1	1			1	1	1	1						
2,4-Dimethylphenol			1	1	1	1			1	1	1	1						
NJ,CLP15						1												
Propylparaben						1												
J,CLP15						1								1				
Unidentified Compound(s)						1								1				
U,J,QS-3			1		1					1						1	1	
1,4-Dioxane			1		1					1						1	1	
U,J,CLP16		2	2	2	2	2			2	2	2	2			2	2	2	
Caprolactam		1	1	1	1	1			1	1	1	1			1	1	1	
2-Methyl-4,6-dinitrophenol		1	1	1	1	1			1	1	1	1			1	1	1	
U,J,QS-4		1	1	1	1										1			
4-Chloroaniline		1	1	1											1			
U,J,QC-3,QM-1					1													
Acenaphthene					1													
U,R,QS-4								1		1				1			1	
4-Chloroaniline								1		1				1			1	

TABLE 3-3a EPA DATA VALIDATION SUMMARY

SDG METHOD QUALIFIER ANALYTE	MIHPT39 GW_30	MIHPT53 SB_24	MIHPT55 SB_5	MIHPT56 SB_6	MIHPT53 GW_24	MiHPT35 SB29.5	MIHPT33 GW_50	MIHPT45 SB_04	RB01MIH PT28	MIHPT39 GW_23	MIHPT39 GW_40	MIHPT36 GW_24	MIHPT36 GW_44	MIHPT48 GW_24	MIHPT48 GW_45	MIHPT94 8GW_24	MIHPT53 GW_35	TB01GW 032619
19-0113																		
CNA:SM 5310B																		
J,QM-1																		
Total Organic Carbon																		
TMTL:EPA 200.8																		
J,QR-2									1									
Selenium									1									
U,J,QM-1		1																
Antimony		1																
TMTL:EPA 6010																		
J,QR-2						1												
Manganese						1												
U,B-2												1						
Iron												1						
U,J,QM-1		1																
Molybdenum		1																
DMTL:EPA 6010																		
U,B-2																		
Iron																		
19-0117																		
VOA:CLP SOM02.4 V																		
U,J,QM-1															1			
1,1-Dichloroethene (1,1-Dichloroethylene)															1			
U,J,QC-3	2			2		2		2	2	2	2	2	2	2	2	2	2	
Bromomethane	1			1		1		1	1	1	1	1	1	1	1	1	1	
Chloromethane	1			1		1		1	1	1	1	1	1	1	1	1	1	
U,J,CLP25					2		2											
cis-1,3-Dichloropropene					1		1											
1,1,1-Trichloroethane					1		1											
U,J,QC-1																		
Acetone																		
NJ,CLP15																		
Cyclotetrasiloxane, octamethyl-.alpha.-Pinene																		
J,CLP15																		
Unidentified Compound(s)																		
J,CLP01				2	1				2		2	1	2		2	2		
cis-1,2-Dichloroethene													1		1			
trans-1,2-Dichloroethene				1					1		1					1		
Methyl Butyl Ketone						1												
Vinyl chloride																		
Carbon disulfide													1					
1,1-Dichloroethene (1,1-Dichloroethylene)					1					1		1					1	
Trichloroethene (Trichloroethylene)														1		1		
U,J,QS-3																		
1,4-Dichlorobenzene																		
1,2-Dibromoethane (EDB)																		
1,2-Dichloroethane																		

TABLE 3-3a EPA DATA VALIDATION SUMMARY

SDG METHOD QUALIFIER ANALYTE	MIHPT39 GW_30	MIHPT53 SB_24	MIHPT55 SB_5	MIHPT56 SB_6	MIHPT53 GW_24	MiHPT35 SB29.5	MIHPT33 GW_50	MIHPT45 SB_04	RB01MIH PT28	MIHPT39 GW_23	MIHPT39 GW_40	MIHPT36 GW_24	MIHPT36 GW_44	MIHPT48 GW_24	MIHPT48 GW_45	MIHPT94 8GW_24	MIHPT53 GW_35	TB01GW 032619
Chlorobenzene																		
1,2,4-Trichlorobenzene																		
Methyl T-Butyl Ether (MTBE)																		
1,3-Dichlorobenzene																		
Carbon Tetrachloride																		
Methylene Chloride																		
Trichlorofluoromethane (Freon 11)																		
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)																		
Methyl Acetate																		
1,2,3-Trichlorobenzene																		
1,2-Dichlorobenzene																		
U,J,CLP25,QS-3																		
1,1,1-Trichloroethane																		
SVOA:CLP SOM02.4 B																		
U,J,QC-3	5					5												
Fluorene	1					1												
4-Chlorophenyl phenyl ether	1					1												
Acenaphthene	1					1												
2,4-Dinitrophenol	1					1												
Hexachlorocyclopentadiene (HCCP)	1					1												
U,J,CLP25	1					1												
Di-n-octylphthalate	1					1												
Dibenzo(a,h)anthracene																		
U,J,QC-1	1					1												
2,4-Dimethylphenol	1					1												
NJ,CLP15																		
Propylparaben																		
J,CLP15																		
Unidentified Compound(s)																		
U,J,QS-3	1																	
1,4-Dioxane	1																	
U,J,CLP16	2					2												
Caprolactam	1					1												
2-Methyl-4,6-dinitrophenol	1					1												
U,J,QS-4	1																	
4-Chloroaniline	1																	
U,J,QC-3,QM-1																		
Acenaphthene																		
U,R,QS-4																		
4-Chloroaniline																		

TABLE 3-3a EPA DATA VALIDATION SUMMARY

SDG METHOD QUALIFIER ANALYTE	TB01SB0 32619	TB02GW 032719	TB02SB0 32819	TB03GW 032919	TB03SB0 32919	TB04GW 040119	TB04SB0 40119	TB05GW 040319	TB05SB0 40319	TB06GW 040419	MiHPT29 GW44	MiHPT29 SB29	MiHPT29 SB52	MiHPT31 GW25	MiHPT31 SB05	MiHPT33 GW_21	MiHPT33 SB_05	MiHPT33 SB_27
19-0113																		
CNA:SM 5310B																		
J,QM-1																		
Total Organic Carbon																		
TMTL:EPA 200.8																		
J,QR-2																		
Selenium																		
U,J,QM-1																		
Antimony																		
TMTL:EPA 6010																		
J,QR-2																		
Manganese																		
U,B-2																		
Iron																		
U,J,QM-1																		
Molybdenum																		
DMTL:EPA 6010																		
U,B-2																		
Iron																		
19-0117																		
VOA:CLP SOM02.4 V																		
U,J,QM-1																		
1,1-Dichloroethene (1,1-Dichloroethylene)																		
U,J,QC-3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Bromomethane	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Chloromethane	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
U,J,CLP25	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
cis-1,3-Dichloropropene	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1,1,1-Trichloroethane	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
U,J,QC-1						1									1			
Acetone						1									1			
NJ,CLP15																		
Cyclotetrasiloxane, octamethyl-.alpha.-Pinene																		
J,CLP15																		
Unidentified Compound(s)																		
J,CLP01											1	1	2	2	1			
cis-1,2-Dichloroethene											1							
trans-1,2-Dichloroethene													1	1	1	1		
Methyl Butyl Ketone																		
Vinyl chloride																		
Carbon disulfide																		
1,1-Dichloroethene (1,1-Dichloroethylene)													1					
Trichloroethene (Trichloroethylene)												1						
U,J,QS-3													6					
1,4-Dichlorobenzene													1					
1,2-Dibromoethane (EDB)																		
1,2-Dichloroethane																		

TABLE 3-3a EPA DATA VALIDATION SUMMARY

SDG METHOD QUALIFIER ANALYTE	TB01SB0 32619	TB02GW 032719	TB02SB0 32819	TB03GW 032919	TB03SB0 32919	TB04GW 040119	TB04SB0 40119	TB05GW 040319	TB05SB0 40319	TB06GW 040419	MiHPT29 GW44	MiHPT29 SB29	MiHPT29 SB52	MiHPT31 GW25	MiHPT31 SB05	MiHPT33 GW_21	MiHPT33 SB_05	MiHPT33 SB_27
Chlorobenzene														1				
1,2,4-Trichlorobenzene														1				
Methyl T-Butyl Ether (MTBE)																		
1,3-Dichlorobenzene														1				
Carbon Tetrachloride																		
Methylene Chloride																		
Trichlorofluoromethane (Freon 11)																		
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)																		
Methyl Acetate																		
1,2,3-Trichlorobenzene														1				
1,2-Dichlorobenzene														1				
U,J,CLP25,QS-3																		
1,1,1-Trichloroethane																		
SVOA:CLP SOM02.4 B																		
U,J,QC-3																		
Fluorene																		
4-Chlorophenyl phenyl ether																		
Acenaphthene																		
2,4-Dinitrophenol																		
Hexachlorocyclopentadiene (HCCP)																		
U,J,CLP25																		
Di-n-octylphthalate																		
Dibenzo(a,h)anthracene																		
U,J,QC-1																		
2,4-Dimethylphenol																		
NJ,CLP15																		
Propylparaben																		
J,CLP15																		
Unidentified Compound(s)																		
U,J,QS-3																		
1,4-Dioxane																		
U,J,CLP16																		
Caprolactam																		
2-Methyl-4,6-dinitrophenol																		
U,J,QS-4																		
4-Chloroaniline																		
U,J,QC-3,QM-1																		
Acenaphthene																		
U,R,QS-4																		
4-Chloroaniline																		

TABLE 3-3a EPA DATA VALIDATION SUMMARY

SDG METHOD QUALIFIER ANALYTE	MiHPT35 SB23	MiHPT35 SB53	MIHPT35 GW_37	MIHPT41 GW_36	MIHPT41 SB_05	MIHPT45 SB_05	MIHPT50 SB_2.5	MIHPT50 SB_4	MIHPT50 SB_5.2	Grand Total
19-0113										
CNA:SM 5310B										
J,QM-1										1
Total Organic Carbon										1
TMTL:EPA 200.8										
J,QR-2										1
Selenium										1
U,J,QM-1										1
Antimony										1
TMTL:EPA 6010										
J,QR-2										3
Manganese										3
U,B-2										2
Iron										2
U,J,QM-1										1
Molybdenum										1
DMTL:EPA 6010										
U,B-2										1
Iron										1
19-0117										
VOA:CLP SOM02.4 V										
U,J,QM-1										1
1,1-Dichloroethene (1,1-Dichloroethylene)										1
U,J,QC-3			2	2						72
Bromomethane			1	1						36
Chloromethane			1	1						36
U,J,CLP25	2	2			2	2	2	2	2	39
cis-1,3-Dichloropropene	1	1			1	1	1	1	1	20
1,1,1-Trichloroethane	1	1			1	1	1	1	1	19
U,J,QC-1				1						10
Acetone				1						10
NJ,CLP15						1				3
Cyclotetrasiloxane, octamethyl-.alpha.-Pinene						1				2
J,CLP15										1
Unidentified Compound(s)										2
J,CLP01			1	2						46
cis-1,2-Dichloroethene										3
trans-1,2-Dichloroethene				1						16
Methyl Butyl Ketone										1
Vinyl chloride										4
Carbon disulfide										1
1,1-Dichloroethene (1,1-Dichloroethylene)			1	1						18
Trichloroethene (Trichloroethylene)										3
U,J,QS-3										14
1,4-Dichlorobenzene										1
1,2-Dibromoethane (EDB)										1
1,2-Dichloroethane										1

TABLE 3-3a EPA DATA VALIDATION SUMMARY

SDG METHOD QUALIFIER ANALYTE	MiHPT35 SB23	MiHPT35 SB53	MIHPT35 GW_37	MIHPT41 GW_36	MIHPT41 SB_05	MIHPT45 SB_05	MIHPT50 SB_2.5	MIHPT50 SB_4	MIHPT50 SB_5.2	Grand Total
Chlorobenzene										1
1,2,4-Trichlorobenzene										1
Methyl T-Butyl Ether (MTBE)										1
1,3-Dichlorobenzene										1
Carbon Tetrachloride										1
Methylene Chloride										1
Trichlorofluoromethane (Freon 11)										1
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)										1
Methyl Acetate										1
1,2,3-Trichlorobenzene										1
1,2-Dichlorobenzene										1
U,J,CLP25,QS-3										1
1,1,1-Trichloroethane										1
SVOA:CLP SOM02.4 B										
U,J,QC-3										69
Fluorene										14
4-Chlorophenyl phenyl ether										14
Acenaphthene										13
2,4-Dinitrophenol										14
Hexachlorocyclopentadiene (HCCP)										14
U,J,CLP25										23
Di-n-octylphthalate										14
Dibenzo(a,h)anthracene										9
U,J,QC-1										10
2,4-Dimethylphenol										10
NJ,CLP15										1
Propylparaben										1
J,CLP15										2
Unidentified Compound(s)										2
U,J,QS-3										6
1,4-Dioxane										6
U,J,CLP16										28
Caprolactam										14
2-Methyl-4,6-dinitrophenol										14
U,J,QS-4										5
4-Chloroaniline										5
U,J,QC-3,QM-1										1
Acenaphthene										1
U,R,QS-4										4
4-Chloroaniline										4

## **Attachment 1**

### **Common Data Validation Definitions**

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ATTACHMENT 1  
Acronyms and Abbreviations

**Common Data Validation Definitions**

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%D	percent difference
%R	percent recovery
%RSD	percent relative standard deviation
°C	degrees Celcius
CCV	continuing calibration verification
CLP	Contract Laboratory Program
DMC	deuterated monitoring compound
EPA	United States Environmental Protection Agency
EB	equipment rinsate blank
H <sup>2</sup> SO <sup>4</sup>	sulfuric acid
HNO <sup>3</sup>	nitric acid
ICAL	initial calibration
ICV	initial calibration verification
LCL	lower control limit
LCS	laboratory control spike
LCSD	laboratory control spike duplicate
MDL	minimum detection limit
mg/k	milligrams per kilogram
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicate
NaOH	sodium hydroxide
PE	performance evaluation
PB	preservative blank
QA	quality assurance
QC	quality control
RL	reporting limit
RPD	relative percent difference
RRF	relative response factor
SDG	sample data package or laboratory project number
SESD	Science and Ecosystem Support Division
SVOC	semi-volatile organic compounds
SU	standard units
TB	trip blank
TIC	tentatively identified compound
UCL	upper control limit
ug/L	micrograms per kilogram
ug/L	micrograms per liter
VOC	volatile organic compounds

**ATTACHMENT 1**  
**Acronyms and Abbreviations**

**EQuIS Database Environmental Matrix**

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AA	ambient air
GW	groundwater
IA	indoor air
ID	investigative derived waste
PW	potable water
SB	subsurface soil
SD	sediment
SF	surface soil
SG	soil gas
SW	surface water

ATTACHMENT 1  
Acronyms and Abbreviations

---

**Data Qualifiers**

**Inorganics**

- J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J- The result is an estimated quantity, but the result may be biased low.
- J+ The result is an estimated quantity, but the result may be biased high.
- The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control (QC) criteria. The analyte may or may not be present in the sample.
- R The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- U The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

**Organics**

- C This qualifier applies to pesticide and Aroclor results when the identification has been confirmed by Gas Chromatograph/Mass Spectrometer (GC/MS). The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL). The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- NJ The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control (QC) criteria. The analyte may or may not be present in the sample.
- R The analyte was analyzed for, but was not detected above the level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.
- U The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.
- X This qualifier applies to pesticide and Aroclor results when GC/MS analysis was attempted but was unsuccessful.

## **Attachment 2**

### **Chain of Custody**

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## WORK ORDER

Printed: 4/24/2019 2:37:52PM

**C191701****US-EPA, Region 4, SESD, QAS**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0117	<b>Contract Lab Case:</b> 48120
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS	

**Project Leader:** Johnston, Shelby      **Date Due:** 06/13/19 (70 day TAT)

Received By: Graham, Robert      Date Received: 04/04/19 00:00

Logged In By: Graham, Robert      Date Logged In: 04/24/19 14:36

D.A.R.T. Project ID: 19-0113  
 Program/Activity: RI  
 Site/Waterbody: Rockwell International Wheel & Trim  
(110000590593)

<b>Analysis</b>	<b>Due</b>	<b>TAT</b>	<b>Comments</b>
<b>C191701-01 RB01MIHPT28 / [ Water / Trip Blank - Water ] Sampled 04/03/19 09:30</b>			
MD No:	D No: B6M1 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-02 TB01GW032619 / [ Water / Trip Blank - Water ] Sampled 03/26/19 08:15</b>			
MD No:	D No: B6G6 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-03 TB01SB032619 / [ Soil / Trip Blank - Soil ] Sampled 03/26/19 08:15</b>			
MD No:	D No: B6G7 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-04 TB02GW032719 / [ Water / Trip Blank - Water ] Sampled 03/27/19 17:00</b>			
MD No:	D No: B6H5 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-05 TB02SB032819 / [ Soil / Trip Blank - Soil ] Sampled 03/28/19 08:15</b>			
MD No:	D No: B6H4 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-06 TB03GW032919 / [ Water / Trip Blank - Water ] Sampled 03/29/19 08:00</b>			
MD No:	D No: B6K7 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-07 TB03SB032919 / [ Soil / Trip Blank - Soil ] Sampled 03/29/19 12:30</b>			
MD No:	D No: B6J1 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-08 TB04GW040119 / [ Water / Trip Blank - Water ] Sampled 04/01/19 13:00</b>			
MD No:	D No: B6L5 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	

## WORK ORDER

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**C191701****US-EPA, Region 4, SESD, QAS**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0117	<b>Contract Lab Case:</b> 48120	
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS		
<hr/>			
Analysis	Due	TAT	Comments
<b>C191701-09 TB04SB040119 / [ Soil / Trip Blank - Soil ] Sampled 04/01/19 07:30</b>			
MD No:	D No: B6K9	EQI	
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-10 TB05GW040319 / [ Water / Trip Blank - Water ] Sampled 04/03/19 07:00</b>			
MD No:	D No: B6M7	EQI	
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-11 TB05SB040319 / [ Soil / Trip Blank - Soil ] Sampled 04/03/19 07:00</b>			
MD No:	D No: B6M0	EQI	
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-12 TB06GW040419 / [ Water / Trip Blank - Water ] Sampled 04/04/19 07:00</b>			
MD No:	D No: B6N1	EQI	
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-13 MIHPT28SB_5 / MIHPT28SB [ Soil / Subsurface Soil ] Sampled 04/03/19 07:45</b>			
MD No:	D No: B6M3	EQI	
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-14 MIHPT28SB_7 / MIHPT28SB [ Soil / Subsurface Soil ] Sampled 04/03/19 08:00</b>			
MD No:	D No: B6M4	EQI	
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-15 MiHPT29GW44 / MIHPT29 [ Water / Groundwater ] Sampled 03/27/19 19:15</b>			
MD No:	D No: B6H6	EQI	
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-16 MiHPT29SB20 / MIHPT29 [ Soil / Subsurface Soil ] Sampled 03/27/19 11:25</b>			
MD No:	D No: B6H1	EQI	
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-17 MiHPT29SB29 / MIHPT29 [ Soil / Subsurface Soil ] Sampled 03/27/19 11:35</b>			
MD No:	D No: B6H2	EQI	
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-18 MiHPT29SB52 / MIHPT29 [ Soil / Subsurface Soil ] Sampled 03/27/19 13:00</b>			
MD No:	D No: B6H3	EQI	
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	

## WORK ORDER

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**C191701****US-EPA, Region 4, SESD, QAS**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0117	<b>Contract Lab Case:</b> 48120
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS	

Analysis	Due	TAT	Comments
<b>C191701-19 MIHPT29GW_24 / MIHPT29GW [ Water / Groundwater ] Sampled 03/29/19 13:30</b>			
MD No: D No: B6J8 EQI			
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
CLP VOA	06/03/19 00:00	60	
<b>C191701-20 MiHPT31GW25 / MIHPT31 [ Water / Groundwater ] Sampled 03/26/19 17:55</b>			
MD No: D No: B6G9 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-21 MiHPT31GW29 / MIHPT31 [ Water / Groundwater ] Sampled 03/26/19 18:20</b>			
MD No: D No: B6H0 EQI			
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
CLP VOA	06/03/19 00:00	60	
<b>C191701-22 MiHPT31SB05 / MIHPT31 [ Soil / Subsurface Soil ] Sampled 03/27/19 16:30</b>			
MD No: D No: B6G8 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-23 MIHPT33GW_21 / MIHPT33GW [ Water / Groundwater ] Sampled 03/30/19 13:25</b>			
MD No: D No: B6J9 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-24 MIHPT33GW_29 / MIHPT33GW [ Water / Groundwater ] Sampled 03/30/19 09:35</b>			
MD No: D No: B6K0 EQI			
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
CLP VOA	06/03/19 00:00	60	
<b>C191701-25 MIHPT33GW_50 / MIHPT33GW [ Water / Groundwater ] Sampled 03/30/19 13:10</b>			
MD No: D No: B6K1 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-26 MIHPT33SB_05 / MIHPT33SB [ Soil / Subsurface Soil ] Sampled 03/29/19 13:00</b>			
MD No: D No: B6J0 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	

## WORK ORDER

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**C191701****US-EPA, Region 4, SESD, QAS**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0117	<b>Contract Lab Case:</b> 48120
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS	

Analysis	Due	TAT	Comments
<b>C191701-27 MIHPT33SB_27 / MIHPT33SB [ Soil / Subsurface Soil ] Sampled 03/29/19 14:15</b>			
MD No:	D No: B6J2 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-28 MIHPT34GW_22 / MIHPT34GW [ Water / Groundwater ] Sampled 04/01/19 15:17</b>			
MD No:	D No: B6L6 EQI		
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
CLP VOA	06/03/19 00:00	60	
<b>C191701-29 MIHPT34GW_26 / MIHPT34GW [ Water / Groundwater ] Sampled 04/01/19 18:00</b>			
MD No:	D No: B6L7 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-30 MiHPT35SB23 / MIHPT35 [ Soil / Subsurface Soil ] Sampled 03/28/19 10:45</b>			
MD No:	D No: B6H7 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-31 MiHPT35SB29.5 / MIHPT35 [ Soil / Subsurface Soil ] Sampled 03/28/19 11:00</b>			
MD No:	D No: B6H8 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-32 MiHPT35SB53 / MIHPT35 [ Soil / Subsurface Soil ] Sampled 03/28/19 12:25</b>			
MD No:	D No: B6H9 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-33 MIHPT35GW_27 / MIHPT35GW [ Water / Groundwater ] Sampled 03/29/19 09:25</b>			
MD No:	D No: B6J6 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
CLP BNA	06/03/19 00:00	60	
<b>C191701-34 MIHPT35GW_37 / MIHPT35GW [ Water / Groundwater ] Sampled 03/29/19 09:45</b>			
MD No:	D No: B6J7 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	

## WORK ORDER

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**C191701****US-EPA, Region 4, SESD, QAS**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0117	<b>Contract Lab Case:</b> 48120
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS	

Analysis	Due	TAT	Comments
<b>C191701-35 MIHPT36GW_24 / MIHPT36GW [ Water / Groundwater ] Sampled 04/05/19</b>			
<b>09:05</b>			
MD No:	D No: B6N7 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-36 MIHPT36GW_44 / MIHPT36GW [ Water / Groundwater ] Sampled 04/05/19</b>			
<b>09:20</b>			
MD No:	D No: B6N8 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-37 MIHPT39GW_23 / MIHPT39GW [ Water / Groundwater ] Sampled 04/03/19</b>			
<b>15:40</b>			
MD No:	D No: B6N0 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-38 MIHPT39GW_30 / MIHPT39GW [ Water / Groundwater ] Sampled 04/03/19</b>			
<b>13:20</b>			
MD No:	D No: B6M8 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>CLP BNA</b>			
CLP BNA	06/03/19 00:00	60	
<b>C191701-39 MIHPT39GW_40 / MIHPT39GW [ Water / Groundwater ] Sampled 04/03/19</b>			
<b>14:45</b>			
MD No:	D No: B6M9 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-40 MIHPT41GW_24 / MIHPT41GW [ Water / Groundwater ] Sampled 03/31/19</b>			
<b>13:25</b>			
MD No:	D No: B6K6 EQI		
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
<b>CLP VOA</b>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-41 MIHPT41GW_36 / MIHPT41GW [ Water / Groundwater ] Sampled 03/31/19</b>			
<b>14:15</b>			
MD No:	D No: B6K5 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-42 MIHPT41SB_05 / MIHPT41SB [ Soil / Subsurface Soil ] Sampled 04/01/19 07:55</b>			
MD No:	D No: B6L0 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	

## WORK ORDER

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**C191701****US-EPA, Region 4, SESD, QAS**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0117	<b>Contract Lab Case:</b> 48120
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS	

Analysis	Due	TAT	Comments
<b>C191701-43 MIHPT41SB_24 / MIHPT41SB [ Soil / Subsurface Soil ] Sampled 04/01/19 09:45</b>			
MD No:	D No: B6L3 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-44 MIHPT45GW_24 / MIHPT45GW [ Water / Groundwater ] Sampled 03/31/19 13:10</b>			
MD No:	D No: B6K3 EQI		
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
CLP VOA	06/03/19 00:00	60	
<b>C191701-45 MIHPT45GW_38 / MIHPT45GW [ Water / Groundwater ] Sampled 03/31/19 14:15</b>			
MD No:	D No: B6K4 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
CLP BNA	06/03/19 00:00	60	
<b>C191701-46 MIHPT45GW_46 / MIHPT45GW [ Water / Groundwater ] Sampled 03/31/19 11:15</b>			
MD No:	D No: B6K8 EQI		
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
CLP VOA	06/03/19 00:00	60	
<b>C191701-47 MIHPT945GW_46 / MIHPT45GW [ Water / Groundwater ] Sampled 03/31/19 11:15</b>			
MD No:	D No: B6K2 EQI		
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
CLP VOA	06/03/19 00:00	60	
<b>C191701-48 MIHPT45SB_04 / MIHPT45SB [ Soil / Subsurface Soil ] Sampled 04/01/19 08:25</b>			
MD No:	D No: B6L1 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-49 MIHPT45SB_05 / MIHPT45SB [ Soil / Subsurface Soil ] Sampled 04/01/19 08:35</b>			
MD No:	D No: B6L2 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-50 MIHPT48GW_24 / MIHPT48GW [ Water / Groundwater ] Sampled 04/04/19 10:40</b>			
MD No:	D No: B6N3 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	

## WORK ORDER

Printed: 4/24/2019 2:37:52PM

**C191701****US-EPA, Region 4, SESD, QAS**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0117	<b>Contract Lab Case:</b> 48120
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS	

Analysis	Due	TAT	Comments
<b>C191701-51 MIHPT48GW_45 / MIHPT48GW [ Water / Groundwater ] Sampled 04/04/19</b>			
<b>10:10</b>			
MD No:	D No: B6N2 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-52 MIHPT948GW_24 / MIHPT48GW [ Water / Groundwater ] Sampled 04/04/19</b>			
<b>10:40</b>			
MD No:	D No: B6N4 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-53 MIHPT49GW_21 / MIHPT49GW [ Water / Groundwater ] Sampled 04/02/19</b>			
<b>10:10</b>			
MD No:	D No: B6L8 EQI		
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
CLP VOA	06/03/19 00:00	60	
<b>C191701-54 MIHPT49GW_41 / MIHPT49GW [ Water / Groundwater ] Sampled 04/02/19</b>			
<b>09:00</b>			
MD No:	D No: B6L9 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
CLP BNA	06/03/19 00:00	60	
<b>C191701-55 MIHPT49SB_14 / MIHPT49SB [ Soil / Subsurface Soil ] Sampled 04/01/19 15:50</b>			
MD No: D No: B6L4 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-56 MIHPT50SB_2.5 / MIHPT50SB [ Soil / Subsurface Soil ] Sampled 03/29/19 15:30</b>			
MD No: D No: B6J3 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-57 MIHPT50SB_4 / MIHPT50SB [ Soil / Subsurface Soil ] Sampled 03/29/19 15:40</b>			
MD No: D No: B6J4 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-58 MIHPT50SB_5.2 / MIHPT50SB [ Soil / Subsurface Soil ] Sampled 03/29/19 15:55</b>			
MD No: D No: B6J5 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	

## WORK ORDER

Printed: 4/24/2019 2:37:52PM

**C191701****US-EPA, Region 4, SESD, QAS**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0117	<b>Contract Lab Case:</b> 48120
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS	

Analysis	Due	TAT	Comments
<b>C191701-59 MIHPT53GW_24 / MIHPT53GW [ Water / Groundwater ] Sampled 04/04/19 12:40</b>			
MD No: D No: B6N5 EQI			
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
CLP VOA	06/03/19 00:00	60	
<b>C191701-60 MIHPT53GW_35 / MIHPT53GW [ Water / Groundwater ] Sampled 04/04/19 14:55</b>			
MD No: D No: B6N6 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-61 MIHPT53SB_24 / MIHPT53SB [ Soil / Subsurface Soil ] Sampled 04/03/19 14:00</b>			
MD No: D No: B6M5 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-62 MIHPT55SB_5 / MIHPT55SB [ Soil / Subsurface Soil ] Sampled 04/03/19 07:25</b>			
MD No: D No: B6M2 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191701-63 MIHPT56SB_6 / MIHPT56SB [ Soil / Subsurface Soil ] Sampled 04/03/19 16:45</b>			
MD No: D No: B6M6 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	

**Analysis packages included in this work order*****CLP BNA***

CLPx BNA Scan B CLPx BNA Scan BS CLPx BNA TICs

***CLP VOA***CLPx VOA Scan V CLPx VOA Scan VT CLPx VOA % Moisture CLPx VOA TICs  
CLPx VOA Scan VS

## WORK ORDER

Printed: 4/24/2019 2:39:08PM

**C191702****US-EPA, Region 4, SESD, QAS**

**Client:** Superfund Remedial (302DD2, 303DD2, 000DD2)  
**Project:** Rockwell International Wheel & Trim - SJOHNS11

**Project Number:** 19-0117  
**Acct # / Location:** 000DD2B48CLA01 Grenada Grenada MS

**Contract Lab Case:** 48120

**Project Leader:** Johnston, Shelby

**Date Due:** 06/13/19 (70 day TAT)

Received By: Graham, Robert

Date Received: 04/04/19 00:00

Logged In By: Graham, Robert

Date Logged In: 04/24/19 14:38

D.A.R.T. Project ID: 19-0113  
Program/Activity: RI  
Site/Waterbody: Rockwell International Wheel & Trim  
(110000590593)

<b>Analysis</b>	<b>Due</b>	<b>TAT</b>	<b>Comments</b>
<b>C191702-01 QA-001-PES / [ Water / Water ] Sampled 03/26/19 16:00</b>			
MD No:	D No: B6F8 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191702-02 QA-002-PES / [ Water / Water ] Sampled 03/26/19 16:00</b>			
MD No:	D No: B6F9 EQI		
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
<b>C191702-03 QA-017-PES / [ Soil / Soil ] Sampled 03/26/19 16:00</b>			
MD No:	D No: B6G0 EQI		
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	

**Analysis packages included in this work order*****CLP BNA***

CLPx BNA Scan B CLPx BNA Scan BS CLPx BNA TICs

***CLP VOA***

CLPx VOA Scan V CLPx VOA Scan VT CLPx VOA % Moisture CLPx VOA TICs  
CLPx VOA Scan VS

## WORK ORDER

Printed: 4/24/2019 2:40:14PM

**C191703****US-EPA, Region 4, SESD, QAS**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0117	<b>Contract Lab Case:</b> 48120
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS	

**Project Leader:** Johnston, Shelby      **Date Due:** 06/13/19 (70 day TAT)

Received By: Graham, Robert      Date Received: 04/04/19 00:00

Logged In By: Graham, Robert      Date Logged In: 04/24/19 14:39

D.A.R.T. Project ID: 19-0113  
 Program/Activity: RI  
 Site/Waterbody: Rockwell International Wheel & Trim  
(110000590593)

<b>Analysis</b>	<b>Due</b>	<b>TAT</b>	<b>Comments</b>
<b>C191703-01 QA-001-PES / [ Water / Water ] Sampled 04/02/19 16:00</b>			
MD No: D No: B7G1 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	
<b>C191703-02 QA-002-PES / [ Water / Water ] Sampled 04/02/19 16:00</b>			
MD No: D No: B7G2 EQI			
<i>A = Contract Lab Sample</i>			
CLP BNA	06/03/19 00:00	60	
<b>C191703-03 QA-017-PES / [ Soil / Soil ] Sampled 04/02/19 16:00</b>			
MD No: D No: B7G3 EQI			
<i>A = Contract Lab Sample</i>			
CLP VOA	06/03/19 00:00	60	

**Analysis packages included in this work order*****CLP BNA***

CLPx BNA Scan B      CLPx BNA Scan BS      CLPx BNA TICs

***CLP VOA***CLPx VOA Scan V      CLPx VOA Scan VT      CLPx VOA % Moisture      CLPx VOA TICs  
CLPx VOA Scan VS

## WORK ORDER

Printed: 3/29/2019 1:15:44PM

**E191309****US-EPA, Region 4, SESD**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0113
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS

**Project Leader:** Johnston, Shelby      **Date Due:** 05/03/19 (35 day TAT)

Received By: Beall, Mike      Date Received: 03/29/19 10:30

Logged In By: Beall, Mike      Date Logged In: 03/29/19 13:11

Samples Received at: <u>2°C</u>	Placed in Cooler after Ice Removed: Yes	D.A.R.T. Project ID: <u>19-0113</u>
Custody Seals: Yes	Sample Containers Intact: Yes	Program/Activity: <u>RI</u>
Custody Seals Intact: Yes	Samples & COC Match: Yes	Site/Waterbody: <u>Rockwell International Wheel &amp; Trim</u>
COC Present: Yes	COC/Labels Agree: Yes	(110000590593)
Ice in Cooler: Yes	All Analyses on COC: Yes	

Analysis	Due	TAT	Expires	Comments
<b>E191309-01 MiHPT29SB20 / MIHPT29   Soil / Subsurface Soil   Sampled 03/27/19 11:25</b>				
<i>A = 8 ounce clear glass;</i>	<i>B = 8 ounce clear glass;</i>			
Metals Scan, Routine-No Mercury	05/03/19 00:00	35	09/23/19 11:25	
% Solids	05/03/19 00:00	35	09/23/19 11:25	
Total Organic Carbon (Routine)	05/03/19 00:00	35	09/23/19 11:25	

**E191309-02 MiHPT31GW29 / MIHPT31 | Water / Groundwater | Sampled 03/26/19 18:20**

<i>A = 1000mL Plastic</i>	<i>B = 1000mL Plastic</i>	<i>C = 1000mL Plastic</i>	<i>D = 250mL Plastic</i>
Hexavalent Chromium, Dissolved	05/03/19 00:00	35	04/23/19 18:20
Metals Scan, Routine-No Mercury	05/03/19 00:00	35	09/22/19 18:20
Nitrate and/or Nitrite (Routine)	05/03/19 00:00	35	04/23/19 18:20
Sulfate (Routine) by Ion Chromatography	05/03/19 00:00	35	04/23/19 18:20
Alkalinity, Total (as CaCO <sub>3</sub> )	05/03/19 00:00	35	04/09/19 18:20
Total Organic Carbon (Routine)	05/03/19 00:00	35	04/23/19 18:20

**E191309-03 MiHPT35SB29.5 / MIHPT35 | Soil / Subsurface Soil | Sampled 03/28/19 11:00**

<i>A = 8 ounce clear glass;</i>	<i>B = 8 ounce clear glass;</i>			
x pH Temp- Hex Chrom Preanalysis	05/03/19 00:00	35	04/25/19 11:00	Auto-Included
% Solids	05/03/19 00:00	35	09/24/19 11:00	Auto-Included
pH-Hexachrom Preanalysis	05/03/19 00:00	35	04/25/19 11:00	Auto-Included
TOC Preanalysis for Cr+6	05/03/19 00:00	35	09/24/19 11:00	Auto-Included
Metals Scan, Routine-No Mercury	05/03/19 00:00	35	09/24/19 11:00	
Hexavalent Chromium 218.6	05/03/19 00:00	35	04/27/19 11:00	

**Analysis packages included in this work order**

***Metals Scan, Routine-No Mercury***

v Trace Metals 6010 ICP

v Major Metals 6010 ICP

Metals, ICP-MS 200.8- Full List

E191309

USEPA Region 4 COC (REGION COPY)

DateShipped: 3/28/2019

CarrierName: FedEx

Airbill No: 7748 2101 7202

## **CHAIN OF CUSTODY RECORD**

Rockwell - MarApr2019

Project Number: 19-0117 ~~103~~  
3/26/14

19-0113

No: SESD - 032819

Lab: Region 4 Lab

Lab Contact: Mike Beall

Lab Phone: 706-355-8856

Analysis Key: SESDMetSoi=SESD - SOIL Metals, SESDTOCsoi=SESD - SOIL TOC, HexCr=SESD - Hexavalent Chromium - Dissolved, SESDMet=SESD - Metals (no mercury) - GW, NNNTOC=SESD - Nitrate/Nitrite Nitrogen - TOC, SESDSulfAl=SESD - Sulfate, Alkalinity, HexCrSoil=SESD - SOIL Hexavalent Chromium

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Phillip Cole	PPR Black & Veatch	13-2819/1730	FEDEx		
			RNBeall EPA SESD ASB	3/29/19 1030	Good

## WORK ORDER

Printed: 4/2/2019 11:10:54AM

**E191401****US-EPA, Region 4, SESD**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0113
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS

**Project Leader:** Johnston, Shelby      **Date Due:** 05/07/19 (35 day TAT)

Received By: Beall, Mike      Date Received: 04/02/19 10:20

Logged In By: Beall, Mike      Date Logged In: 04/02/19 11:04

Samples Received at: <b>0.8°C</b>	Placed in Cooler after Ice Removed:	D.A.R.T. Project ID: <b>19-0113</b>
Custody Seals: Yes	Sample Containers Intact: Yes	Program/Activity: <b>RI</b>
Custody Seals Intact: Yes	Samples & COC Match: Yes	Site/Waterbody: <b>Rockwell International Wheel &amp; Trim</b>
COC Present: Yes	COC/Labels Agree: Yes	(110000590593)
Ice in Cooler: Yes	All Analyses on COC: Yes	

Analysis	Due	TAT	Expires	Comments
<b>E191401-01 MIHPT29GW_24 / MIHPT29GW [ Water / Groundwater ] Sampled 03/29/19 13:30</b>				
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>				
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/25/19 13:30	
Sulfate (Routine) by Ion Chromatography	05/07/19 00:00	35	04/26/19 13:30	
Hexavalent Chromium, Dissolved	05/07/19 00:00	35	04/26/19 13:30	
Total Organic Carbon (Routine)	05/07/19 00:00	35	04/26/19 13:30	
Nitrate and/or Nitrite (Routine)	05/07/19 00:00	35	04/26/19 13:30	
Alkalinity, Total (as CaCO3)	05/07/19 00:00	35	04/12/19 13:30	

<b>E191401-02 MIHPT33GW_29 / MIHPT33GW [ Water / Groundwater ] Sampled 03/30/19 09:35</b>
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>

Hexavalent Chromium, Dissolved	05/07/19 00:00	35	04/27/19 09:35
Sulfate (Routine) by Ion Chromatography	05/07/19 00:00	35	04/27/19 09:35
Alkalinity, Total (as CaCO3)	05/07/19 00:00	35	04/13/19 09:35
Total Organic Carbon (Routine)	05/07/19 00:00	35	04/27/19 09:35
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/26/19 09:35
Nitrate and/or Nitrite (Routine)	05/07/19 00:00	35	04/27/19 09:35

<b>E191401-03 MIHPT33GW_50 / MIHPT33GW [ Water / Groundwater ] Sampled 03/30/19 13:10</b>
<i>A = 1000mL Plastic      B = 250mL Plastic</i>

Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/26/19 13:10
Hexavalent Chromium, Dissolved	05/07/19 00:00	35	04/27/19 13:10

<b>E191401-04 MIHPT35GW_27 / MIHPT35GW [ Water / Groundwater ] Sampled 03/29/19 09:25</b>
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>

Alkalinity, Total (as CaCO3)	05/07/19 00:00	35	04/12/19 09:25
Sulfate (Routine) by Ion Chromatography	05/07/19 00:00	35	04/26/19 09:25
Nitrate and/or Nitrite (Routine)	05/07/19 00:00	35	04/26/19 09:25
Hexavalent Chromium, Dissolved	05/07/19 00:00	35	04/26/19 09:25
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/25/19 09:25
Total Organic Carbon (Routine)	05/07/19 00:00	35	04/26/19 09:25

## WORK ORDER

Printed: 4/2/2019 11:10:54AM

**E191401****US-EPA, Region 4, SESD**

**Client:** Superfund Remedial (302DD2, 303DD2, 000DD2)  
**Project:** Rockwell International Wheel & Trim - SJOHNS11

**Project Number:** 19-0113  
**Acct # / Location:** 000DD2B48CLA01 Grenada Grenada MS

Analysis	Due	TAT	Expires	Comments
<b>E191401-05 MIHPT41GW_24 / MIHPT41GW [ Water / Groundwater ] Sampled 03/31/19 13:25</b>				
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>				
Sulfate (Routine) by Ion Chromatography	05/07/19 00:00	35	04/28/19 13:25	
Total Organic Carbon (Routine)	05/07/19 00:00	35	04/28/19 13:25	
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/27/19 13:25	
Nitrate and/or Nitrite (Routine)	05/07/19 00:00	35	04/28/19 13:25	
Alkalinity, Total (as CaCO3)	05/07/19 00:00	35	04/14/19 13:25	
Hexavalent Chromium, Dissolved	05/07/19 00:00	35	04/28/19 13:25	
<b>E191401-06 MIHPT41SB_24 / MIHPT41SB [ Soil / Subsurface Soil ] Sampled 04/01/19 09:45</b>				
<i>A = 8 ounce clear glass;      B = 8 ounce clear glass;      C = 8 ounce clear glass;</i>				
Hexavalent Chromium 218.6	05/07/19 00:00	35	05/01/19 09:45	
Total Organic Carbon (Routine)	05/07/19 00:00	35	09/28/19 09:45	
pH-Hexachrom Preanalysis	05/07/19 00:00	35	04/29/19 09:45	Auto-Included
TOC Preanalysis for Cr+6	05/07/19 00:00	35	09/28/19 09:45	Auto-Included
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/28/19 09:45	
x pH Temp- Hex Chrom Preanalysis	05/07/19 00:00	35	04/29/19 09:45	Auto-Included
% Solids	05/07/19 00:00	35	09/28/19 09:45	
<b>E191401-07 MIHPT45GW_24 / MIHPT45GW [ Water / Groundwater ] Sampled 03/31/19 13:10</b>				
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>				
Hexavalent Chromium, Dissolved	05/07/19 00:00	35	04/28/19 13:10	
Nitrate and/or Nitrite (Routine)	05/07/19 00:00	35	04/28/19 13:10	
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/27/19 13:10	
Sulfate (Routine) by Ion Chromatography	05/07/19 00:00	35	04/28/19 13:10	
Alkalinity, Total (as CaCO3)	05/07/19 00:00	35	04/14/19 13:10	
Total Organic Carbon (Routine)	05/07/19 00:00	35	04/28/19 13:10	
<b>E191401-08 MIHPT45GW_38 / MIHPT45GW [ Water / Groundwater ] Sampled 03/31/19 14:15</b>				
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>				
Sulfate (Routine) by Ion Chromatography	05/07/19 00:00	35	04/28/19 14:15	
Hexavalent Chromium, Dissolved	05/07/19 00:00	35	04/28/19 14:15	
Alkalinity, Total (as CaCO3)	05/07/19 00:00	35	04/14/19 14:15	
Nitrate and/or Nitrite (Routine)	05/07/19 00:00	35	04/28/19 14:15	
Total Organic Carbon (Routine)	05/07/19 00:00	35	04/28/19 14:15	
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/27/19 14:15	

## WORK ORDER

Printed: 4/2/2019 11:10:54AM

**E191401****US-EPA, Region 4, SESD**

**Client:** Superfund Remedial (302DD2, 303DD2, 000DD2)  
**Project:** Rockwell International Wheel & Trim - SJOHNS11

**Project Number:** 19-0113  
**Acct # / Location:** 000DD2B48CLA01 Grenada Grenada MS

Analysis	Due	TAT	Expires	Comments
<b>E191401-09 MIHPT45GW_46 / MIHPT45GW [ Water / Groundwater ] Sampled 03/31/19 11:15</b>				
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>				
Sulfate (Routine) by Ion Chromatography	05/07/19 00:00	35	04/28/19 11:15	
Alkalinity, Total (as CaCO3)	05/07/19 00:00	35	04/14/19 11:15	
Total Organic Carbon (Routine)	05/07/19 00:00	35	04/28/19 11:15	
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/27/19 11:15	
Hexavalent Chromium, Dissolved	05/07/19 00:00	35	04/28/19 11:15	
Nitrate and/or Nitrite (Routine)	05/07/19 00:00	35	04/28/19 11:15	
<b>E191401-10 MIHPT945GW_46 / MIHPT45GW [ Water / Groundwater ] Sampled 03/31/19 11:15</b>				
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>				
Sulfate (Routine) by Ion Chromatography	05/07/19 00:00	35	04/28/19 11:15	
Hexavalent Chromium, Dissolved	05/07/19 00:00	35	04/28/19 11:15	
Alkalinity, Total (as CaCO3)	05/07/19 00:00	35	04/14/19 11:15	
Nitrate and/or Nitrite (Routine)	05/07/19 00:00	35	04/28/19 11:15	
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/27/19 11:15	
Total Organic Carbon (Routine)	05/07/19 00:00	35	04/28/19 11:15	
<b>E191401-11 MIHPT45SB_04 / MIHPT45SB [ Soil / Subsurface Soil ] Sampled 04/01/19 08:25</b>				
<i>A = 8 ounce clear glass;      B = 8 ounce clear glass;</i>				
TOC Preanalysis for Cr+6	05/07/19 00:00	35	09/28/19 08:25	Auto-Included
Hexavalent Chromium 218.6	05/07/19 00:00	35	05/01/19 08:25	
% Solids	05/07/19 00:00	35	09/28/19 08:25	Auto-Included
pH-Hexachrom Preanalysis	05/07/19 00:00	35	04/29/19 08:25	Auto-Included
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/28/19 08:25	
x pH Temp- Hex Chrom Preanalysis	05/07/19 00:00	35	04/29/19 08:25	Auto-Included
<b>E191401-12 MIHPT49SB_14 / MIHPT49SB [ Soil / Subsurface Soil ] Sampled 04/01/19 15:50</b>				
<i>A = 8 ounce clear glass;      B = 8 ounce clear glass;      C = 8 ounce clear glass;</i>				
Hexavalent Chromium 218.6	05/07/19 00:00	35	05/01/19 15:50	
pH-Hexachrom Preanalysis	05/07/19 00:00	35	04/29/19 15:50	Auto-Included
% Solids	05/07/19 00:00	35	09/28/19 15:50	Auto-Included
Metals Scan, Routine-No Mercury	05/07/19 00:00	35	09/28/19 15:50	
x pH Temp- Hex Chrom Preanalysis	05/07/19 00:00	35	04/29/19 15:50	Auto-Included
TOC Preanalysis for Cr+6	05/07/19 00:00	35	09/28/19 15:50	Auto-Included
Total Organic Carbon (Routine)	05/07/19 00:00	35	09/28/19 15:50	

Analysis packages included in this work order

***Metals Scan, Routine-No Mercury***

v Trace Metals 6010 ICP

v Major Metals 6010 ICP

Metals, ICP-MS 200.8- Full List

E191401

## USEPA Region 4 COC (REGION COPY)

Date Shipped: 4/1/2019

Carrier Name: FedEx

Airbill No: 774843827508

## CHAIN OF CUSTODY RECORD

Rockwell/MS

Project Number: 19-0113

Cooler #:

No: 04/01/19-0003

Lab: Region 4 Lab

Lab Contact: Mike Beall

Lab Phone: 706-355-8856

Sample Identifier	CLP Sample No.	Media/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
-12	MIHPT49SB_14	Subsurface Soil/ A. Hernandez	Grab	TMTL Metals(35), TOC(35), HEXCR(35)	1048 (Ice), 1049 (Ice), A (Ice) (3) ✓	MIHPT49SB	04/01/2019 15:50	Field Sample
-01	MIHPT29GW_24	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT29GW	03/29/2019 13:30	Field Sample
-02	MIHPT33GW_29	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT33GW	03/30/2019 09:35	Field Sample
-03	MIHPT33GW_50	Groundwater/ A. Hernandez	Grab	TMTL Metals(35), HEXCR(35)	1024 (HNO3 pH<2), A (Ice + buffer provided by SESD) (2) ✓	MIHPT33GW	03/30/2019 13:10	Field Sample
-04	MIHPT35GW_27	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT35GW	03/29/2019 09:25	Field Sample
-05	MIHPT41GW_24	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT41GW	03/31/2019 13:25	Field Sample

Sample(s) to be used for Lab QC: MIHPT33GW\_29 Tag 1014, MIHPT33GW\_29 Tag 1015, MIHPT33GW\_29 Tag A, MIHPT33GW\_29 Tag B

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TMTL Metals=(TMTL) Total Metals - No Mercury, TOC=Total Organic Carbon - Soil, HEXCR=Hexavalent Chromium -Soil, NNNTOC=(CNA) Nitrate/Nitrite Nitrogen -TOC, ALKSULF=(CNA) Alkalinity, Total (as CaCO<sub>3</sub>), Sulfate

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
✓	✓	✓	✓	✓	✓

✓

R.M. Beall EPA SESD ASB

4-2-19  
1020

Good

E191401

## USEPA Region 4 COC (REGION COPY)

DateShipped: 4/1/2019

CarrierName: FedEx

AirbillNo: 774843827508

## CHAIN OF CUSTODY RECORD

Rockwell/MS

Project Number: 19-0113

Cooler #:

No: 04/01/19-0003

Lab: Region 4 Lab

Lab Contact: Mike Beall

Lab Phone: 706-355-8856

Sample Identifier	CLP Sample No.	Media/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
-06	MIHPT41SB_24	Subsurface Soil/ A. Hernandez	Grab	TMTL Metals(35), TOC(35), HEXCR(35)	1048 (Ice), 1049 (Ice), A (Ice) (3) ✓	MIHPT41SB	04/01/2019 09:45	Field Sample
-07	MIHPT45GW_24	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT45GW	03/31/2019 13:10	Field Sample
-08	MIHPT45GW_38	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT45GW	03/31/2019 14:15	Field Sample
-09	MIHPT45GW_46	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT45GW	03/31/2019 11:15	Field Sample
-11	MIHPT45SB_04	Subsurface Soil/ A. Hernandez	Grab	TMTL Metals(35), HEXCR(35)	1043 (Ice), A (Ice) (2) ✓	MIHPT45SB	04/01/2019 08:25	Field Sample
-10	MIHPT945GW_46	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT45GW	03/31/2019 11:15	Field Duplicate

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TMTL Metals=(TMTL) Total Metals - No Mercury, TOC=Total Organic Carbon - Soil, HEXCR=Hexavalent Chromium -Soil, NNNTOC=(CNA) Nitrate/Nitrite Nitrogen -TOC, ALKSULF=(CNA) Alkalinity, Total (as CaCO<sub>3</sub>), Sulfate

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
None	R. Beall EPA SESD ASB	4-2-19 1020			Good

## WORK ORDER

Printed: 4/3/2019 11:19:42AM

**E191404****US-EPA, Region 4, SESD**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0113
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS

**Project Leader:** Johnston, Shelby      **Date Due:** 05/08/19 (35 day TAT)

Received By: Beall, Mike      Date Received: 04/03/19 10:45

Logged In By: Beall, Mike      Date Logged In: 04/03/19 11:15

Samples Received at: <b>2.4°C</b>	Placed in Cooler after Ice Removed:	D.A.R.T. Project ID: <b>19-0113</b>
Custody Seals: Yes	Sample Containers Intact: Yes	Program/Activity: <b>RI</b>
Custody Seals Intact: Yes	Samples & COC Match: Yes	Site/Waterbody: <b>Rockwell International Wheel &amp; Trim</b>
COC Present: Yes	COC/Labels Agree: Yes	(110000590593)
Ice in Cooler: Yes	All Analyses on COC: Yes	

Analysis	Due	TAT	Expires	Comments
<b>E191404-01 MIHPT34GW_22 / MIHPT34GW [ Water / Groundwater ] Sampled 04/01/19 15:17</b>				
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>				
Metals Scan-Dissolved	05/08/19 00:00	35	09/28/19 15:17	
Total Organic Carbon (Routine)	05/08/19 00:00	35	04/29/19 15:17	
Alkalinity, Total (as CaCO3)	05/08/19 00:00	35	04/15/19 15:17	
Sulfate (Routine) by Ion Chromatography	05/08/19 00:00	35	04/29/19 15:17	
Hexavalent Chromium, Dissolved	05/08/19 00:00	35	04/29/19 15:17	
Nitrate and/or Nitrite (Routine)	05/08/19 00:00	35	04/29/19 15:17	

<b>E191404-02 MIHPT34GW_26 / MIHPT34GW [ Water / Groundwater ] Sampled 04/01/19 18:00</b>
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>

Hexavalent Chromium, Dissolved	05/08/19 00:00	35	04/29/19 18:00
Metals Scan, Routine-No Mercury	05/08/19 00:00	35	09/28/19 18:00
Alkalinity, Total (as CaCO3)	05/08/19 00:00	35	04/15/19 18:00
Nitrate and/or Nitrite (Routine)	05/08/19 00:00	35	04/29/19 18:00
Sulfate (Routine) by Ion Chromatography	05/08/19 00:00	35	04/29/19 18:00
Total Organic Carbon (Routine)	05/08/19 00:00	35	04/29/19 18:00

<b>E191404-03 MIHPT49GW_21 / MIHPT49GW [ Water / Groundwater ] Sampled 04/02/19 10:10</b>
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>

Sulfate (Routine) by Ion Chromatography	05/08/19 00:00	35	04/30/19 10:10
Hexavalent Chromium, Dissolved	05/08/19 00:00	35	04/30/19 10:10
Nitrate and/or Nitrite (Routine)	05/08/19 00:00	35	04/30/19 10:10
Alkalinity, Total (as CaCO3)	05/08/19 00:00	35	04/16/19 10:10
Metals Scan, Routine-No Mercury	05/08/19 00:00	35	09/29/19 10:10
Total Organic Carbon (Routine)	05/08/19 00:00	35	04/30/19 10:10

## WORK ORDER

Printed: 4/3/2019 11:19:42AM

**E191404****US-EPA, Region 4, SESD**

**Client:** Superfund Remedial (302DD2, 303DD2, 000DD2)  
**Project:** Rockwell International Wheel & Trim - SJOHNS11

**Project Number:** 19-0113  
**Acct # / Location:** 000DD2B48CLA01 Grenada Grenada MS

Analysis	Due	TAT	Expires	Comments
<b>E191404-04 MIHPT49GW_41 / MIHPT49GW [ Water / Groundwater ] Sampled 04/02/19 09:00</b>				
<i>A = 1000mL Plastic</i>	<i>B = 1000mL Plastic</i>	<i>C = 1000mL Plastic</i>	<i>D = 250mL Plastic</i>	
Nitrate and/or Nitrite (Routine)	05/08/19 00:00	35	04/30/19 09:00	
Alkalinity, Total (as CaCO3)	05/08/19 00:00	35	04/16/19 09:00	
Hexavalent Chromium, Dissolved	05/08/19 00:00	35	04/30/19 09:00	
Metals Scan, Routine-No Mercury	05/08/19 00:00	35	09/29/19 09:00	
Total Organic Carbon (Routine)	05/08/19 00:00	35	04/30/19 09:00	
Sulfate (Routine) by Ion Chromatography	05/08/19 00:00	35	04/30/19 09:00	

**Analysis packages included in this work order****Metals Scan, Routine-No Mercury**

v Trace Metals 6010 ICP                    v Major Metals 6010 ICP                    Metals, ICP-MS 200.8- Full List

**Metals Scan-Dissolved**

Metals, Dissolved- ICP-MS                    v Dissolved Met 6010 Majors                    v Dissolved Met 6010 Trace

E191404

## USEPA Region 4 COC (REGION COPY)

DateShipped: 4/2/2019

CarrierName: FedEx

AirbillNo: 774862937264

## CHAIN OF CUSTODY RECORD

Rockwell/MS

Project Number: 19-0113

Cooler #:

No: 04/02/19-0004

Lab: Region 4 Lab

Lab Contact: Mike Beall

Lab Phone: 706-355-8856

Sample Identifier -01	CLP Sample No.	Media/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
MIHPT34GW_22		Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals Dis(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT34GW	04/01/2019 15:17	Field Sample
MIHPT34GW_26 -02		Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT34GW	04/01/2019 18:00	Field Sample
MIHPT49GW_21 -03		Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT49GW	04/02/2019 10:10	Field Sample
MIHPT49GW_41 -04		Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT49GW	04/02/2019 09:00	Field Sample

Special Instructions: MIHPT34GW\_22 TMTL metals Diss - field filtered

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: HEXCR=Hexavalent Chromium (dissolved), TMTL Metals Dis=(TMTL) Total Metals(Dissolved) No Hg (TAT 35 Days), NNNTOC=(CNA) Nitrate/Nitrite Nitrogen -TOC, ALKSULF=(CNA) Alkalinity, Total (as CaCO<sub>3</sub>), Sulfate, TMTL Metals=(TMTL) Total Metals - No Mercury

Items/Reason Relinquished by (Signature and Organization) Date/Time Received by (Signature and Organization) Date/Time Sample Condition Upon Receipt

Allan Hernandez *Allan Hernandez* Black and Veatch 04/02/19 17:00 FedexRmBeall EPA SESD ASB 4-3-19  
1045

Good

## WORK ORDER

Printed: 4/5/2019 1:05:32PM

**E191408****US-EPA, Region 4, SESD**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0113
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS

<b>Project Leader:</b>	<b>Johnston, Shelby</b>	<b>Date Due:</b>	<b>05/10/19 (35 day TAT)</b>
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<b>Received By:</b>	Beall, Mike	<b>Date Received:</b>	04/05/19 10:45
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<b>Logged In By:</b>	Beall, Mike	<b>Date Logged In:</b>	04/05/19 13:01
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Samples Received at:	<u>2.1°C</u>	Placed in Cooler after Ice Removed:	D.A.R.T. Project ID:	<u>19-0113</u>
Custody Seals: Yes		Sample Containers Intact: Yes	Program/Activity:	<u>RI</u>
Custody Seals Intact: Yes		Samples & COC Match: Yes	Site/Waterbody:	<u>Rockwell International Wheel &amp; Trim</u>
COC Present: Yes		COC/Labels Agree: Yes		<u>(110000590593)</u>
Ice in Cooler: Yes		All Analyses on COC: Yes		

Analysis	Due	TAT	Expires	Comments
<b>E191408-01 RB01MIHPT28 / [ Water / Rinse Water Blank ] Sampled 04/03/19 09:30</b>				
<i>A = 1000mL Plastic</i>				
Metals Scan, Routine-No Mercury	05/10/19 00:00	35	09/30/19 09:30	

<b>E191408-02 MIHPT28SB_5 / MIHPT28SB [ Soil / Subsurface Soil ] Sampled 04/03/19 07:45</b>				
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<i>A = 8 ounce clear glass;</i>	<i>B = 8 ounce clear glass;</i>	<i>C = 8 ounce clear glass;</i>	
% Solids	05/10/19 00:00	35	09/30/19 07:45 Auto-Included
Hexavalent Chromium 218.6	05/10/19 00:00	35	05/03/19 07:45
Metals Scan, Routine-No Mercury	05/10/19 00:00	35	09/30/19 07:45
TOC Preanalysis for Cr+6	05/10/19 00:00	35	09/30/19 07:45 Auto-Included
x pH Temp- Hex Chrom Preanalysis	05/10/19 00:00	35	05/01/19 07:45 Auto-Included
Total Organic Carbon (Routine)	05/10/19 00:00	35	09/30/19 07:45
pH-Hexachrom Preanalysis	05/10/19 00:00	35	05/01/19 07:45 Auto-Included

<b>E191408-03 MIHPT28SB_7 / MIHPT28SB [ Soil / Subsurface Soil ] Sampled 04/03/19 08:00</b>				
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<i>A = 8 ounce clear glass;</i>	<i>B = 8 ounce clear glass;</i>	<i>C = 8 ounce clear glass;</i>	
Metals Scan, Routine-No Mercury	05/10/19 00:00	35	09/30/19 08:00
Total Organic Carbon (Routine)	05/10/19 00:00	35	09/30/19 08:00
TOC Preanalysis for Cr+6	05/10/19 00:00	35	09/30/19 08:00 Auto-Included
pH-Hexachrom Preanalysis	05/10/19 00:00	35	05/01/19 08:00 Auto-Included
x pH Temp- Hex Chrom Preanalysis	05/10/19 00:00	35	05/01/19 08:00 Auto-Included
% Solids	05/10/19 00:00	35	09/30/19 08:00
Hexavalent Chromium 218.6	05/10/19 00:00	35	05/03/19 08:00

<b>E191408-04 MIHPT39GW_23 / MIHPT39GW [ Water / Groundwater ] Sampled 04/03/19</b>				
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<b>15:40</b>
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<i>A = 1000mL Plastic</i>	<i>B = 250mL Plastic</i>	
Hexavalent Chromium, Dissolved	05/10/19 00:00	35 05/01/19 15:40
Metals Scan-Dissolved	05/10/19 00:00	35 09/30/19 15:40

## WORK ORDER

Printed: 4/5/2019 1:05:32PM

E191408

US-EPA, Region 4, SESD

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0113
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS

Analysis	Due	TAT	Expires	Comments
<b>E191408-05 MIHPT39GW_30 / MIHPT39GW [ Water / Groundwater ] Sampled 04/03/19 13:20</b>				
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>				
Hexavalent Chromium, Dissolved	05/10/19 00:00	35	05/01/19 13:20	
Metals Scan-Dissolved	05/10/19 00:00	35	09/30/19 13:20	
Alkalinity, Total (as CaCO <sub>3</sub> )	05/10/19 00:00	35	04/17/19 13:20	
Total Organic Carbon (Routine)	05/10/19 00:00	35	05/01/19 13:20	
Sulfate (Routine) by Ion Chromatography	05/10/19 00:00	35	05/01/19 13:20	
Nitrate and/or Nitrite (Routine)	05/10/19 00:00	35	05/01/19 13:20	
<b>E191408-06 MIHPT39GW_40 / MIHPT39GW [ Water / Groundwater ] Sampled 04/03/19 14:45</b>				
<i>A = 1000mL Plastic      B = 250mL Plastic</i>				
Hexavalent Chromium, Dissolved	05/10/19 00:00	35	05/01/19 14:45	
Metals Scan-Dissolved	05/10/19 00:00	35	09/30/19 14:45	
<b>E191408-07 MIHPT53SB_24 / MIHPT53SB [ Soil / Subsurface Soil ] Sampled 04/03/19 14:00</b>				
<i>A = 8 ounce clear glass;      B = 8 ounce clear glass;      C = 8 ounce clear glass;</i>				
Total Organic Carbon (Routine)	05/10/19 00:00	35	09/30/19 14:00	
Metals Scan, Routine-No Mercury	05/10/19 00:00	35	09/30/19 14:00	
TOC Preanalysis for Cr+6	05/10/19 00:00	35	09/30/19 14:00	Auto-Included
pH-Hexachrom Preanalysis	05/10/19 00:00	35	05/01/19 14:00	Auto-Included
Hexavalent Chromium 218.6	05/10/19 00:00	35	05/03/19 14:00	
x pH Temp- Hex Chrom Preanalysis	05/10/19 00:00	35	05/01/19 14:00	Auto-Included
% Solids	05/10/19 00:00	35	09/30/19 14:00	
<b>E191408-08 MIHPT55SB_5 / MIHPT55SB [ Soil / Subsurface Soil ] Sampled 04/03/19 07:25</b>				
<i>A = 8 ounce clear glass;      B = 8 ounce clear glass;      C = 8 ounce clear glass;</i>				
% Solids	05/10/19 00:00	35	09/30/19 07:25	
Hexavalent Chromium 218.6	05/10/19 00:00	35	05/03/19 07:25	
Metals Scan, Routine-No Mercury	05/10/19 00:00	35	09/30/19 07:25	
Total Organic Carbon (Routine)	05/10/19 00:00	35	09/30/19 07:25	
pH-Hexachrom Preanalysis	05/10/19 00:00	35	05/01/19 07:25	Auto-Included
x pH Temp- Hex Chrom Preanalysis	05/10/19 00:00	35	05/01/19 07:25	Auto-Included
TOC Preanalysis for Cr+6	05/10/19 00:00	35	09/30/19 07:25	Auto-Included
<b>E191408-09 MIHPT56SB_6 / MIHPT56SB [ Soil / Subsurface Soil ] Sampled 04/03/19 16:45</b>				
<i>A = 8 ounce clear glass;      B = 8 ounce clear glass;      C = 8 ounce clear glass;</i>				
Metals Scan, Routine-No Mercury	05/10/19 00:00	35	09/30/19 16:45	
Hexavalent Chromium 218.6	05/10/19 00:00	35	05/03/19 16:45	
Total Organic Carbon (Routine)	05/10/19 00:00	35	09/30/19 16:45	
x pH Temp- Hex Chrom Preanalysis	05/10/19 00:00	35	05/01/19 16:45	Auto-Included
pH-Hexachrom Preanalysis	05/10/19 00:00	35	05/01/19 16:45	Auto-Included
% Solids	05/10/19 00:00	35	09/30/19 16:45	Auto-Included
TOC Preanalysis for Cr+6	05/10/19 00:00	35	09/30/19 16:45	Auto-Included

**WORK ORDER**

Printed: 4/5/2019 1:05:32PM

**E191408****US-EPA, Region 4, SESD**

**Client:** Superfund Remedial (302DD2, 303DD2, 000DD2)  
**Project:** Rockwell International Wheel & Trim - SJOHNS11

**Project Number:** 19-0113  
**Acct # / Location:** 000DD2B48CLA01 Grenada Grenada MS

**Analysis packages included in this work order****Metals Scan, Routine-No Mercury**

v Trace Metals 6010 ICP      v Major Metals 6010 ICP      Metals, ICP-MS 200.8- Full List

**Metals Scan-Dissolved**

Metals, Dissolved- ICP-MS      v Dissolved Met 6010 Majors      v Dissolved Met 6010 Trace

E191408

## USEPA Region 4 COC (REGION COPY)

Date Shipped: 4/4/2019

Carrier Name: FedEx

Airbill No: 774881879609

## CHAIN OF CUSTODY RECORD

Rockwell/MS

Project Number: 19-0113

Cooler #:

No: 04/04/19-0008

Lab: Region 4 Lab

Lab Contact: Mike Beall

Lab Phone: 706-355-8856

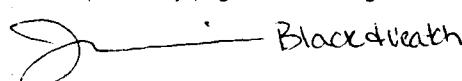
	Sample Identifier	CLP Sample No.	Media/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
-02	MIHPT28SB_5		Subsurface Soil/ A. Hernandez	Grab	TMTL Metals(35), TOC(35), HEXCR(35)	1048 (Ice), 1049 (Ice), A (Ice) (3) ✓	MIHPT28SB	04/03/2019 07:45	Field Sample
-03	MIHPT28SB_7		Subsurface Soil/ A. Hernandez	Grab	TMTL Metals(35), TOC(35), HEXCR(35)	1048 (Ice), 1049 (Ice), A (Ice) (3) ✓	MIHPT28SB	04/03/2019 08:00	Field Sample
-04	MIHPT39GW_23		Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals Dis(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2) (2) ✓	MIHPT39GW	04/03/2019 15:40	Field Sample
-05	MIHPT39GW_30		Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals Dis(35), NNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT39GW	04/03/2019 13:20	Field Sample
-06	MIHPT39GW_40		Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals Dis(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2) (2) ✓	MIHPT39GW	04/03/2019 14:45	Field Sample
-07	MIHPT53SB_24		Subsurface Soil/ A. Hernandez	Grab	TMTL Metals(35), TOC(35), HEXCR(35)	1048 (Ice), 1049 (Ice), A (Ice) (3) ✓	MIHPT53SB	04/03/2019 14:00	Field Sample
-08	MIHPT55SB_5		Subsurface Soil/ A. Hernandez	Grab	TMTL Metals(35), TOC(35), HEXCR(35)	1048 (Ice), 1049 (Ice), A (Ice) (3) ✓	MIHPT55SB	04/03/2019 07:25	Field Sample

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TMTL Metals=(TMTL) Total Metals - No Mercury, TOC=Total Organic Carbon - Soil, HEXCR=Hexavalent Chromium -Soil, TMTL Metals Dis=(TMTL) Total Metals(Dissolved) No Hg (TAT 35 Days), NNTOC=(CNA) Nitrate/Nitrite Nitrogen -TOC, ALKSULF=(CNA) Alkalinity, Total (as CaCO3), Sulfate

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Shipped	 Black & Veatch	4/4/19 1500	 Mike Beall EPA SESD ASB	4-5-19 1045	Good

E191408

## USEPA Region 4 COC (REGION COPY)

DateShipped: 4/4/2019

CarrierName: FedEx

AirbillNo: 774881879609

## CHAIN OF CUSTODY RECORD

Rockwell/MS

Project Number: 19-0113

Cooler #:

No: 04/04/19-0008

Lab: Region 4 Lab

Lab Contact: Mike Beall

Lab Phone: 706-355-8856

Sample Identifier	CLP Sample No.	Media/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
-09	MIHPT56SB_6	Subsurface Soil/ A. Hernandez	Grab	TMTL Metals(35), TOC(35), HEXCR(35)	1048 (Ice), 1049 (Ice), A (Ice) (3)	MIHPT56SB	04/03/2019 16:45 ✓	Field Sample
-01	RB01MIHPT28	Rinse Water Blank/ A. Hernandez	Grab	TMTL Metals(35)	1015 (Ice + HNO3 pH<2) (1)	#R4DART#	04/03/2019 09:30	Field Sample

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Special Instructions:

Analysis Key: TMTL Metals=(TMTL) Total Metals - No Mercury, TOC=Total Organic Carbon - Soil, HEXCR=Hexavalent Chromium -Soil, TMTL Metals Dis=(TMTL) Total Metals(Dissolved) No Hg (TAT 35 Days), NNNTOC=(CNA) Nitrate/Nitrite Nitrogen -TOC, ALKSULF=(CNA) Alkalinity, Total (as CaCO<sub>3</sub>), Sulfate

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Shipped	 Black & Veatch	4/4/19 1500	 Mike Beall EPA SESD ABB	4-5-19 1045	Good

## WORK ORDER

Printed: 4/9/2019 11:00:49AM

**E191502****US-EPA, Region 4, SESD**

<b>Client:</b> Superfund Remedial (302DD2, 303DD2, 000DD2)	<b>Project Number:</b> 19-0113
<b>Project:</b> Rockwell International Wheel & Trim - SJOHNS11	<b>Acct # / Location:</b> 000DD2B48CLA01 Grenada Grenada MS

<b>Project Leader:</b>	<b>Johnston, Shelby</b>	<b>Date Due:</b>	<b>05/14/19 (35 day TAT)</b>
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<b>Received By:</b>	Beall, Mike	<b>Date Received:</b>	04/09/19 10:20
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<b>Logged In By:</b>	Beall, Mike	<b>Date Logged In:</b>	04/09/19 10:56
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Samples Received at:	<u>1.3°C</u>	Placed in Cooler after Ice Removed:	D.A.R.T. Project ID:	<u>19-0113</u>
Custody Seals: Yes		Sample Containers Intact: Yes	Program/Activity:	<u>RI</u>
Custody Seals Intact: Yes		Samples & COC Match: Yes	Site/Waterbody:	<u>Rockwell International Wheel &amp; Trim</u>
COC Present: Yes		COC/Labels Agree: Yes		<u>(110000590593)</u>
Ice in Cooler: Yes		All Analyses on COC: Yes		

Analysis	Due	TAT	Expires	Comments
<b>E191502-01 MIHPT36GW_24 / MIHPT36GW [ Water / Groundwater ] Sampled 04/05/19 09:05</b>				
<i>A = 1000mL Plastic                            B = 250mL Plastic</i>				
Metals Scan, Routine-No Mercury	05/14/19 00:00	35	10/02/19 09:05	
Hexavalent Chromium, Dissolved	05/14/19 00:00	35	05/03/19 09:05	
<b>E191502-02 MIHPT36GW_44 / MIHPT36GW [ Water / Groundwater ] Sampled 04/05/19 09:20</b>				
<i>A = 1000mL Plastic                            B = 250mL Plastic</i>				
Metals Scan, Routine-No Mercury	05/14/19 00:00	35	10/02/19 09:20	
Hexavalent Chromium, Dissolved	05/14/19 00:00	35	05/03/19 09:20	
<b>E191502-03 MIHPT48GW_24 / MIHPT48GW [ Water / Groundwater ] Sampled 04/04/19 10:40</b>				
<i>A = 1000mL Plastic                            B = 250mL Plastic</i>				
Hexavalent Chromium, Dissolved	05/14/19 00:00	35	05/02/19 10:40	
Metals Scan-Dissolved	05/14/19 00:00	35	10/01/19 10:40	
<b>E191502-04 MIHPT48GW_45 / MIHPT48GW [ Water / Groundwater ] Sampled 04/04/19 10:10</b>				
<i>A = 1000mL Plastic                            B = 250mL Plastic</i>				
Hexavalent Chromium, Dissolved	05/14/19 00:00	35	05/02/19 10:10	
Metals Scan, Routine-No Mercury	05/14/19 00:00	35	10/01/19 10:10	
<b>E191502-05 MIHPT948GW_24 / MIHPT48GW [ Water / Groundwater ] Sampled 04/04/19 10:40</b>				
<i>A = 1000mL Plastic                            B = 250mL Plastic</i>				
Metals Scan-Dissolved	05/14/19 00:00	35	10/01/19 10:40	
Hexavalent Chromium, Dissolved	05/14/19 00:00	35	05/02/19 10:40	

## WORK ORDER

Printed: 4/9/2019 11:00:49AM

**E191502****US-EPA, Region 4, SESD**

**Client:** Superfund Remedial (302DD2, 303DD2, 000DD2)  
**Project:** Rockwell International Wheel & Trim - SJOHNS11

**Project Number:** 19-0113  
**Acct # / Location:** 000DD2B48CLA01 Grenada Grenada MS

Analysis	Due	TAT	Expires	Comments
<b>E191502-06 MIHPT53GW_24 / MIHPT53GW [ Water / Groundwater ] Sampled 04/04/19 12:40</b>				
<i>A = 1000mL Plastic      B = 1000mL Plastic      C = 1000mL Plastic      D = 250mL Plastic</i>				
Hexavalent Chromium, Dissolved	05/14/19 00:00	35	05/02/19 12:40	
Sulfate (Routine) by Ion Chromatography	05/14/19 00:00	35	05/02/19 12:40	
Nitrate and/or Nitrite (Routine)	05/14/19 00:00	35	05/02/19 12:40	
Total Organic Carbon (Routine)	05/14/19 00:00	35	05/02/19 12:40	
Metals Scan, Routine-No Mercury	05/14/19 00:00	35	10/01/19 12:40	
Alkalinity, Total (as CaCO <sub>3</sub> )	05/14/19 00:00	35	04/18/19 12:40	
<b>E191502-07 MIHPT53GW_35 / MIHPT53GW [ Water / Groundwater ] Sampled 04/04/19 14:55</b>				
<i>A = 1000mL Plastic      B = 250mL Plastic</i>				
Metals Scan-Dissolved	05/14/19 00:00	35	10/01/19 14:55	
Hexavalent Chromium, Dissolved	05/14/19 00:00	35	05/02/19 14:55	
<b>Analysis packages included in this work order</b>				
<b><i>Metals Scan, Routine-No Mercury</i></b>				
v Trace Metals 6010 ICP	v Major Metals 6010 ICP	Metals, ICP-MS 200.8- Full List		
<b><i>Metals Scan-Dissolved</i></b>				
Metals, Dissolved- ICP-MS	v Dissolved Met 6010 Majors	v Dissolved Met 6010 Trace		

E191502

## USEPA Region 4 COC (REGION COPY)

Date Shipped: 4/8/2019

Carrier Name: FedEx

Airbill No: 774911262371

## CHAIN OF CUSTODY RECORD

Rockwell/MS

Project Number: 19-0113

Cooler #:

No: 04/08/19-0010

Lab: Region 4 Lab

Lab Contact: Mike Beall

Lab Phone: 706-355-8856

Sample Identifier -01	CLP Sample No.	Media/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
MIHPT36GW_24		Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2) (2) ✓	MIHPT36GW	04/05/2019 09:05	Field Sample
-02	MIHPT36GW_44	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2) (2) ✓	MIHPT36GW	04/05/2019 09:20	Field Sample
-03	MIHPT48GW_24	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals Dis(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2) (2) ✓	MIHPT48GW	04/04/2019 10:40	Field Sample
-04	MIHPT48GW_45	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2) (2) ✓	MIHPT48GW	04/04/2019 10:10	Field Sample
-06	MIHPT53GW_24	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals(35), NNNTOC(35), ALKSULF(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2), A (H2SO4 pH<2), B (Ice) (4) ✓	MIHPT53GW	04/04/2019 12:40	Field Sample
-07	MIHPT53GW_35	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals Dis(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2) (2) ✓	MIHPT53GW	04/04/2019 14:55	Field Sample
-05	MIHPT948GW_24	Groundwater/ A. Hernandez	Grab	HEXCR(35), TMTL Metals Dis(35)	1014 (Ice + buffer provided by SESD), 1015 (Ice + HNO3 pH<2) (2) ✓	MIHPT48GW	04/04/2019 10:40	Field Duplicate

Sample(s) to be used for Lab QC: MIHPT48GW\_45 Tag 1014, MIHPT48GW\_45 Tag 1015 - Special Instructions: Total Metals Filtered

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: HEXCR=Hexavalent Chromium (dissolved), TMTL Metals=(TMTL) Total Metals - No Mercury, TMTL Metals Dis=(TMTL) Total Metals(Dissolved) No Hg (TAT 35 Days). NNNTOC=(CNA) Nitrate/Nitrite Nitrogen -TOC, ALKSULF=(CNA) Alkalinity, Total (as CaCO3), Sulfate

Items/Reason Relinquished by (Signature and Organization) Date/Time Received by (Signature and Organization) Date/Time Sample Condition Upon Receipt

Allan Hernandez Allan Hernandez Black and Veatch 04/08/19 1700

Fedex

RmBeall EPA SESD ASB 4-9-19

1020 Good

**Attachment 3**

**Sample Data Sheets with Additional Interpreted Qualifiers**

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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0113

Project: 19-0113, Rockwell International Wheel &amp; Trim - Reported by Daniel Adams

## Classical/Nutrient Analyses

**Project: 19-0113, Rockwell International Wheel & Trim****Sample ID:** MIHPT45GW\_46**Lab ID:** E191401-09**Station ID:** MIHPT45GW**Matrix:** Groundwater**Date Collected:** 3/31/19 11:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
E1640192	Alkalinity, Total (as CaCO <sub>3</sub> )	55		mg/L	1.0	4/04/19 8:19	4/04/19 8:19	SM 2320B
14808-79-8	Sulfate as SO <sub>4</sub>	43		mg/L	0.10	4/10/19 14:59	4/15/19 21:00	EPA 300.0
E701250	Total Organic Carbon	2.7	J	mg/L	1.0	4/15/19 11:56	4/17/19 16:01	SM 5310B
E701177	Nitrate/Nitrite as N	0.050	U	mg/L	0.050	4/16/19 11:04	4/17/19 15:43	EPA 353.2



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Project: 19-0113, Rockwell International Wheel &amp; Trim - Reported by Daniel Adams

## Classical/Nutrient Analyses

**Project: 19-0113, Rockwell International Wheel & Trim****Sample ID:** MIHPT945GW\_46**Lab ID:** E191401-10**Station ID:** MIHPT45GW**Matrix:** Groundwater**Date Collected:** 3/31/19 11:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
E1640192	Alkalinity, Total (as CaCO <sub>3</sub> )	55		mg/L	1.0	4/04/19 8:19	4/04/19 8:19	SM 2320B
14808-79-8	Sulfate as SO <sub>4</sub>	42		mg/L	0.10	4/10/19 14:59	4/15/19 21:21	EPA 300.0
E701250	Total Organic Carbon	1.7	J	mg/L	1.0	4/15/19 11:56	4/17/19 16:26	SM 5310B
E701177	Nitrate/Nitrite as N	0.050	U	mg/L	0.050	4/16/19 11:04	4/17/19 15:43	EPA 353.2

## **Attachment 4**

### **QC Support Documentation**

**(Not Necessary for this Sampling Event)**

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